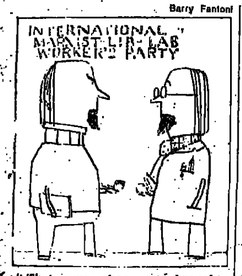
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Barry Fantoni

"That new chap you brought stayed awake the whole meeting. Do you suppose he's a police informant?"

All universities 'under Special Branch watch'

by Simon Midgley

Special Branch officers or their informants are collecting information on the political activities of students in every university in Britain a Labour MP claimed this week. Such political surveillance could be the thin end of a wedge leading to increasing interference in other areas of academic life, he said.

These allegations by Mr Robin Cook, Labour MP for Edinburgh Central, follow an incident at Paisley College of Technology where a student was offered tax-free payments by a Special Branch officer to report on student political activities.

Two Scottish MPs have already expressed concern over the incident, the National Union of Students is to protest to the Home Secretary and an executive committee of college governors was due to meet again yesterday to consider it.

The Special Branch approach was made on November 22 last year when Mr John Oswald, the college secretary, sent a note to a class lecturer asking that first year sociology student, Mr Robert McNeil, aged 20, should go to his office.

Mr Oswald's office was empty when Mr McNeil arrived and a member of staff directed him to another room where a local special branch officer was waiting for him.

In a statement issued two hours after the encounter, following consultations with some members of staff and the college's student association, Mr McNeil said he had been asked whether he was interested in helping the police "with secret and confidential information" on the political activities of students at the college.

"He asked about my political allegiance and I refused to answer the question. I asked him why he wanted to know and what the purpose of his visit was. He wanted to know about political activity in Paisley College. I expressed surprise and told him that I thought that people's political activities were their own affairs.

"He said he had told the college he had been sent from Edinburgh to interview me about an investigation at Edinburgh, but that I was not in trouble of any sort. He asked me again if I was interested and I said that I was not. He said that financial incentives would be tax free and said I would not be seen personally again, and that any information I gave would be treated in strictest confidence.

Universities strongly criticised for emphasis on research

The traditional place of research in higher education was damaging several areas of the system it was said in speeches to the North of England education conference this week by Lord James of Rusholme and Dr Patrick Nuttgens, director of Leeds Polytechnic. Judith Judd reports.

The universities' emphasis on research often endangers the quality of their teaching, Lord James of Rusholme told the conference. He believed that research was a fundamental activity of a university but too often candidates for teaching jobs were judged by their published work "and sometimes, one fears, by its quantity rather than its quality."

In his presidential address he said: "We must recognize that most university teachers do not, in fact, possess truly original minds and would do better reflecting on and interpreting what is already known rather than adding to the body of new facts."

The young teacher might feel that his teaching was less important than additions to the mass of published work.

Lord James spoke of two other dangers which he believed threatened universities. One was the demand for "relevance". The view that university curricula should be drastically revised to bring them into line with the needs of the real world would lead to an increase in purely vocational studies or courses saturated with political ideology.

Many studies apparently remote from the contemporary world brought students face to face with problems of human experience and helped them to think clearly.

The universities' idea of usefulness should not be the same as that held by society at large. "Their function is not simply to respond to social needs but to transfer them: not simply to give the community what it wants, but to indicate what it ought to want."

The third danger was brought about by financial stringency. Economies were now imperilling the morale and threatening the work of the universities. "It is not simply the scale of the economies that causes me concern but a certain glee that I detect in some quarters when they are imposed."

The feeling went deep that universities had failed the nation and that they were full of ineffectual dons and revolting students. However, they were held in almost embarrassing regard abroad. Our educational system was almost the only industry which turned out its products more cheaply and more quickly and at least as effectively as any country in the world.

Earlier, he said the attempt to maintain the character of universities as we know them meant that it was imperative for other forms of higher education to be created.

The polytechnics, the colleges of higher and further education must break down the false equation between higher education and university education. The stronger the other colleges, the healthier universities would be since they would be freer from students who were not really committed to rigorous academic work.


Lord James of Rusholme

'Break hold on system'

The traditional hold of the universities over education must be broken, Dr Patrick Nutgens, director of Leeds Polytechnic, said. He called for a radical recasting of higher education which would bring universities under the same management system as other colleges and end their stranglehold on examinations.

The dominance of the university ethos had helped produce a system which elevated and rewarded those who had least to contribute to society, he said. Universities had always put their emphasis on research rather than teaching, including literary research about matters so uninteresting that no one was likely to want to do it again.

A small part of this research was of the utmost significance "but for the most part the material just poured in and out, weighing down the library floor, becoming sooner or later the stuff for more research".

This tradition still inspired most educational thinking. Underlying the Great Debate and the Government's Green Paper *Education in Schools* were the assumptions that the gifted would go to academic studies while the less gifted attended to the world of work.

Tinkering with and reorganizing the education system did not solve everything. "It merely enables academics and administrators to achieve their dream of sitting forever on committees, with the illusion of power and the reality of idleness."

By 1990 Britain should be producing twice as many graduates as there were jobs of the type which a graduate would now expect. Change was necessary and the universities were the key to any reform. What was needed was one system of a managerial and administrative kind and the maximum variety of courses and teaching methods. There was also need for one system of pay and conditions of service to allow movement between institutions.

Regional advisory councils and the inspectorate should be abolished unless universities were brought within the system. "It is perfectly absurd to go to meetings and fight with your friends about a slice of cake when a neighbouring university can eat it all up while you are quarrelling."

The status of universities was in many ways a deceit. "Behind the fog of verbiage about autonomy and academic freedom lurks the reality of public finance and charitable endowment." However, this might be the kind of myth needed. Any revision of higher education must recognize the vital position of the universities and protect their values.

Welsh review teacher training battle

A new bid to save teacher training at the Polytechnic of Wales is to be launched by Mid Glamorgan County Council. The decision to try again follows the overturning of policy by Secretary of State for Scotland, Mr Bruce Millan, in allowing three Scottish colleges to retain teacher training places.

Mid Glamorgan is hoping that the transfer of power for higher and further education from the Department of Education and Science to the Welsh Office in April will provide the new opportunity for reconsideration.

The leader of Mid Glamorgan council, Mr Phillip Squire, said this week that their policy for across the board reductions in all Welsh colleges to avoid the axing of any one of them had been vindicated by the Scottish decision.

He said that Mid Glamorgan, the polytechnic education department closed.

He emphasized that the college had developed a number of specialist courses that would be lost if it closed competely. There was a one-year diploma course in the teaching of handicapped children and courses to train teachers to teach in Welsh.

The reversal in Scotland follows political pressure including a resignation threat by an Under Secretary of State at the Scottish Office, Mr Harry Ewing, whose Stirling, Falkirk, and Grangemouth constituency contained one of the threatened colleges, Callendar Park.

Mid Glamorgan is hoping to bring equal political pressure on the Secretary of State for Wales, Mr John Morris, over its college.

In Wales, the Government originally intended to close the teacher training departments of two colleges, Swansea College and Cardiff College of Education.

But the Swansea college was saved after a lengthy campaign by West Glamorgan County Council.

The reprieve for the West Wales college was achieved by switching student places from the other Welsh colleges to make up numbers. This policy was originally pressed by the Welsh Joint Education Committee so that all the Welsh colleges could remain open.

This is the policy that the Secretary of State for Scotland has now accepted and it has brought new hope to Mid Glamorgan.

A member of the Welsh executive of the Association of Teachers in Further and Higher Education, Mr Leslie Rees, said they were concerned that the present mix of university and local authority controlled teacher training colleges in Wales was creating imbalances.

He pointed out that the much smaller Llandaff College of Educa-

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Poly finance group says Oakes is superficial

by Simon Midgley

The Oakes committee, which has been reviewing the costs of higher education in the public sector, has done little more than scratch the surface of the problem.

This view was expressed recently by The Polytechnic Finance Officers' Group (PFOG) after the news that the committee is likely to recommend a new system of financing colleges and polytechnics.

Commenting on the suggestion that 85 per cent of the costs should be distributed by a new national council while 15 per cent should be paid by local authorities, PFOG says: "The only effect of the latest formula will ultimately be a limiting action on these polytechnics which carry out a substantial amount of advanced work."

So far, it adds, the committee has done "little more than scratch the surface. It has examined only the superficial problems of distributing the cost.

"The only mite of control its recommendations would render is perhaps the financial incentive of 15 per cent of expenditure being charged on the maintaining authorities. In many instances any such proportion borne locally will be less of a burden than that currently borne by the local resources".

One is tempted, PFOG says, to join those who are already asking whether a change in the funding formula will really have any effect on financial control.

"There is nothing wrong with the present formula: there simply appears to be no management of it.

"The Oakes committee would probably serve some useful purpose if it simply created some form of criterion which would give the polytechnics and other large institutions the incentive to manage themselves. There is currently no incentive, only the 'big stick' of the local education authority", PFOG says.

Perhaps the Oakes committee ought to be looking at expenditure controls. Should funds for higher education expenditure not be apportioned by some logical means based on objective factors?

Should it not then be the responsibility of each polytechnic to manage itself effectively within its individual allocation? Is it not due to the meddling by local government departments into their affairs that polytechnics have been unable to recruit administrative staff of sufficiently high calibre to control expenditure effectively?

Referring to Middlesex Polytechnic, which has recently created the post of assistant director (finance), PFOG asks whether every institution spending more than £12 million per annum should not have a financial controller at directorate level.

Vice-chancellors concerned about photocopy proposals

The Committee of Vice-Chancellors and Principals will oppose proposals to restrict photocopying made in the Whitford Report on Copyright.

Concern has been growing in universities about the recommendation in the report that the existing right to make single photocopies for research or private study under section 7 of the 1965 Copyright Act should be abolished.

The CVCP's latest newsletter says: "The Vice-Chancellors' Committee's own committee on libraries has taken the view that these changes would be generally inimical to the free communication and exchange of information and ideas on which scholarship rests and we will urge that the present latitude for single copying be retained."

The report recommends the introduction of a blanket licensing system for photocopying which would exact an annual fee for the owners of copyrights.

The aim of the report which was published in March this year is to put copyright law on a simple, uniform basis and to solve problems arising from the increasing use of copying facilities.

The report supported its recommendation for the abolition of the present freedom to photocopy on the grounds that library copying was affecting subscriptions to learned journals so that some of them were no longer viable However, this contention has been challenged by universities.

The CVCP is submitting its views to the Department of Trade. It is also concerned about the cost of annual licence fees, the additional burden falling on university libraries because of more record keeping and the effect of the proposals on inter-library loans which rely heavily on photocopying.

Blanket licensing would also apply to audio and visual recording with a payment of levy on the sale of equipment.

The CVCP's committee on libraries felt the idea of a levy was fair but that the proposed licensing system would face the same difficulties as the proposal for printed material.

UKCOSA fears on new scheme

A warning that the Government's introduction of high tuition fees will make it increasingly difficult for poorer overseas students, however well qualified, to study in Britain has been made by the United Kingdom Council for Overseas Students Affairs.

At a meeting with Mrs Judith Hart, Minister for Overseas Development, just before Christmas the UKCOSA put a case for a new scheme of awards of a more flexible nature than the recently introduced fee support scheme.

The council says that government ministries, statutory professional and voluntary organizations should devise new arrangements which preserve the rights of receiving institutions and offer positive discrimination in the form of financial help to the poorer student.

This would, says the council in its latest newsletter, be a tremendous advance towards sanity, justice and prudent planning of overseas students' affairs.

"The pitfalls, however, are considerable, not least the dangers of centralized bipartite, inter-government control. We must continue to press, and hope for, the closest and fullest consultation between government departments and outside bodies who have a direct interest and expertise in overseas students' affairs now before the final decisions are taken", the newsletter warns.

CNAA gets three new members

Three new members have been appointed to the Council for National Academic Awards by Mrs Shirley Williams, Secretary of State for Education and Science.

The new members are Mr S. F. Bolt, head of English and general studies at the Cambridgeshire College of Arts and Technology; Mr G. R. Hall, director of Brighton Polytechnic; and Lady Windlesham, who is Prudence Glynn, fashion editor of *The Times*.

They replace Dr G. S. Bosworth, who has resigned on retirement; Dr R. G. Murray, who has taken up a post as an officer of the CNAA; and Mr F. H. K. Henrion, whose term on the council has expired.

School for safety

About 150 university safety representatives will attend a one-day school at Imperial College London on February 17. The set up, which is being organized by the Association of University Teachers, will look at the problem of applying the new health and safety regulations in universities and how safety committees can be formed. Representatives of the Health and Safety Commission will take part in the conference.



The 1977 MacRobert Award, presented for innovation in engineering or physical technologies, has been won by a team who successfully developed the Malvern Correlator, a sophisticated electronics instrument used to measure the movement of particles or molecules in applications as diverse as air flow over an aerofoil and blood flow in the retina of the eye. A gold medal and prize money totalling £25,000 was awarded to the researchers from the Royal Signals and Radar Establishment and Malvern Instruments, a British electro optical company. They are (from left to right) Dr D. S. Trudgill, Dr E. R. Pike, Mr R. Jones, Dr C. J. Oliver and Dr E. Jakeman.

Fewer foreign books bought at Cambridge

Dons at Cambridge University are concerned about the decline in the number of foreign books being bought for the library.

The university library's annual report says that the "most significant and disturbing trend has been the decline in the number of foreign books of academic importance which it has been possible to purchase from the library's recurrent grant for books".

Of the 25,048 foreign books and pamphlets received five years ago no less than 19,455 were selected and bought for their academic importance.

In 1975-76 the 19,151 foreign books and pamphlets included only about 15,000 books chosen for their academic importance.

The report says: "This decline of about a quarter in the number of foreign academic books purchased is the result of the inflation of book prices and the inability of the university to increase the library's recurrent grant for books to a level which balances that inflation."

It adds that the situation worsened during the year because of the drop in the sterling exchange rate against the dollars, from about $2.40 in autumn, 1975 to just under $1.80 in July 1976.

To avoid overspending, the library had to put severe limits on orders in spring 1976 until the beginning of the next financial year.

Even a supplementary grant of £5,000 for books made by the university's general board covered only a tiny part of the depreciation in the value of money.

"In the circumstances it is not surprising that the number of recommendations for the purchase of books and other material which in 1973-74 had been 21,627 and in 1974-75 had been 16,588 dropped to 13,039."

Despite the fall in the number of foreign books bought, the total number of books and other materials donated to the library has not declined.

BL to spend £40,000 on science study

by Patricia Santinelli

The British Library is to spend about £40,000 on the establishment of a committee to study the scientific information system of the United Kingdom.

Its creation is the result of work carried out by various review panels in different scientific disciplines, sponsored by the BL's research and development department since 1973. In 1976 this culminated in a proposal to set up a committee.

The committee is to be based at the Royal Society under the guidance of its Scientific Information Committee. The latter will be responsible for approving its work programme and channelling policy recommendations through the council to the scientific community in general.

The overall aims of the programme are to identify the main elements in the scientific information system such as authors of primacy scientific communications, learned societies, libraries and research registers, the relations these have with users, the function they perform and their part in making policy decisions.

It will also examine existing relations between different levels of the system and the manner in which impending or suggested changes in one part of the system may have repercussions elsewhere.

Additionally the committee will consider the effects on user needs of possible changes in the direction of scientific effort and on user behaviour resulting from the development of computer-based services. Studies of the ways in which the system is funded and the existing problems in funding will also be undertaken.

On the basis of this it will make recommendations to the scientific community and various policy organizations for maintaining and improving the effectiveness of the system in the interest both of scientific research and of the general welfare of society.

College accepts offer of posts at Durham

by Judith Judd

The College of St Hild and St Bede, Durham, has accepted an offer of 40 posts in Durham University as a first step towards a merger between the two institutions.

In accepting the offer at an extraordinary meeting, the college governing body reiterated that no more posts could be found for the college's staff.

A resolution passed at the meeting went on: "The Governors are prepared to regard the offer as a first stage in the negotiations towards a merger between the college and the university and therefore wish the negotiations to proceed in order that maximum use may be made of the new opportunities created."

The college which is an Anglican foundation agreed reluctantly to the merger because of cuts in its intake. It was told in June that it must cut its numbers from 700 to 400 by 1981.

The university hopes to be able to put a comprehensive set of proposals to the college's governing body and to the senate and council this term.

In his annual report Sir Dermot Christopherson, vice-chancellor of Durham lists some of the difficulties which must be tackled.

He says that the staff at the college have been employed entirely on work connected with education which will only be about half what it was three years ago. They have also been employed on different terms from university staff.

A merger also involves the purchase on behalf of the university of most of the college buildings. In addition, the merger would more than double the work done by the university through its school of education and more than double the school's academic staff.

Sir Derman says: "We have received an assurance from the University Grants Committee that the university will not be worse off financially as a result of the merger but to interpret the assurance with any precision in terms of the additional income required to match the additional responsibilities is easy."

On the academic implications of the merger, Sir Derman said that with a smaller entry to teacher training, standards of admission would be expected to rise. There was no reason to think that when mature candidates became interested university students they would not be equal to those admitted on other courses.

The school of education at Durham should aim to be one of the places from which the future leaders of the teaching profession would emerge.

Workman finds 'lost treasure'

A treasure trove of illustrations from the 1860s has been turned up by a workman at the University College of Wales, Aberystwyth. The visual art department at the college had known of the existence of the prints for years but they had been lost since 1931.

The college's annual report for 1925 recorded that a large collection of woodcuts from books and periodicals had been purchased by the college in 1924. The collection represented the work of the great period of English illustration of the 1860s.

Extensive searches were made but to no avail. It was feared that the collection had been damaged beyond repair when the college museum was put into store during World War II.

The collection finally reappeared when a sealed cupboard was removed recently. The prints were in excellent condition as they had been stored in museum boxes. The packing materials were dated 1931.

Among the 5,000 prints are the works of over 400 artists including Holman Hunt and John Millais. The prints are now being used by the visual art department which hopes to stage an exhibition of the more important items.

New Year Honours

Leavis joins a great tradition

One of Britain's most famous critics, scholars and teachers, Dr F. R. Leavis, has been made a Companion of Honour in the New Year honours list, for services to the study of English Literature.

A founder and editor of *Scrutiny*, the famous quarterly literary review, he has taught at several British universities including Cambridge and York and has been widely honoured for his contribution to literary critical thought. His work includes *The Great Tradition*, a study of four major novelists.

Professor Oliver Ross McGregor, Professor of Social Institutions at the University of London and head of the department of sociology at Bedford College since 1964, has been made a life peer. President of the National Council for One Parent Families, he is also joint director of the Rowntree Legal Research Unit and chairman of the Royal Commission on the Press.

Mr Charles Carter, vice-chancellor of the University of Lancaster since 1963, Professor William Butterfield, regius professor of physics at the University of Cambridge, a professorial fellow of Downing College, Cambridge, and chairman of the Medicines Commission since 1976, and Andrew Shonfield, director of the Royal Institute of International Affairs and a former chairman of the Social Science Research Council, are among those who have been made Knights Bachelor.

Barons

McGregor, Oliver Ross, professor of social institutions, London University.

Companions of Honour

Leavis, Frank Raymond, for services to the study of English literature.

Knights Bachelor

Bates, David Robert, FRS, research professor of theoretical physics, Queen's University, Belfast; Butterfield, William John Hughes, regius professor of physics, Cambridge University; Carter, Charles Frederick, vice-chancellor, Lancaster University; Hopkinson, Henry Thomas, for services to journalism; Shonfield, Andrew Akiba, director, Royal Institute of International Affairs; Smart, Professor George Algernon, director, British Postgraduate Medical Federation; Stone, John Richard Nicholas, Lately Professor of finance and accounting, Cambridge University; Symington, Professor Thomas, lately director, Institute of Cancer Research.

Order of the Bath

KCB

Hamilton, James Arnot, Permanent Under-Secretary of State, Department of Education and Science.

CB

J. D. Brierley, Under-Secretary, Department of Education and Science.





F. R. Leavis, top, and Professor Oliver Ross receive knighthoods

Order of the British Empire

CBE

R. C. Cobb, professor of modern history, Oxford; S. Cohen, professor of chemical pathology, Guy's Hospital Medical School; G. V. Cooke, county education officer, Lincolnshire; W. Davey, president, Portsmouth Polytechnic; Professor W. E. J. Farvis, lately professor of electrical engineering, Edinburgh University; Professor D. J. Finney, FRS, director, unit of statistics, Agriculture Research Council; E. M. Foulkes, charitable services to medical and scientific research; A. W. Kenny, chief scientific officer, Department of Environment; Professor K. P. Liddelow, lately dean of dental studies, King's College Hospital Dental School; Professor E. M. McGirr, dean of faculty of medicine, Glasgow University; W. A. McNeill, chairman of governors, Ulster College; Professor D. C. Pack, services to education in Scotland; W. L. L. Rees, professor of psychiatry, St Bartholomew's Hospital Medical College; Professor N. F. Robertson, principal, East of Scotland College of Agriculture; J. A. Springett, chief education officer, Essex; L. E. Waddilove, director, Joseph Rowntree Memorial Trust; R. Wilson, FRS. Perren professor of astronomy, London University.

OBE

F. F. Coombes, education welfare officer, Avon County Council; J. E. Douglas, charitable services to medical research; F. T. Farmer, professor of medical physics, University of Newcastle upon Tyne; Miss C. L. Henry, lately registrar, University of London Institute of Education; Professor H. W. Langlands, services to higher education overseas; W. R. Lee, lately departmental chief inspector, H.E.A.; G. W. McLean, services to dental research; H. H. Shelton, lately assistant director, Middlesex Polytechnic; D. Davies, Memorial Institute of International Studies; H. L. Thubron, services to art education.

MBE

Miss R. J. Bunting, overseas sales director, Cambridge University Press; services to exports; Miss L. H. M. Culver, director of nursing education, Dundee College of Nursing and Midwifery; Miss R. R. Hunt, administrative officer (examinations), Institute of Civil Engineers; Miss J. Pearson, appointments officer, Technical Education and Training Organization for Overseas Countries; H. W. L. Pegal, senior research assistant, Department of Education and Science; P. A. Ray, lately principal lecturer, Leicester Polytechnic; F. C. C. Trewin, principal of adult education, Hillingdon.

British Empire Medal

United Kingdom

C. Lasted, college superintendent, Gold-smiths' College, London; Mrs M. Ward, senior messenger, Department of Education and Science.

Overseas list

CBE

L. R. Pernig, lately director, International Education Bureau, UNESCO, Geneva; D. H. Hill, for service to university education in Nigeria.

OBE

B. Jones, service to university education in Kenya; A. T. Rhodes, permanent secretary, Ministry of Education, Home and Social Affairs, St Kitts Nevis-Anguilla.

MBE

A. A. Diaz, principal education officer, Education Department, Belize; A. S. Jackson, senior education officer, Ministry of Education, Bermuda.

Commonwealth of Australia list

CBE

Professor P. T. Fink, professor of mechanical engineering, University of New South Wales; Professor J. W. Lance, professor of neurology, University of New South Wales; Professor of surgery, University of Melbourne; Dr A. L. G. Rees, for services to science of chemical physics; Dr H. K. Worner, for services to science and technology of energy.

OBE

N. D. Harper, Emeritus professor of history, University of Melbourne

Governors praise 'weak' principal

by Maggie Richards

Retiring governors of Firecroft College at Birmingham have paid tribute to the principal Mr Tony Corfield, and criticized the "unjust appraisal of his character" by a Government committee of inquiry which recommended his dismissal.

The committee of inquiry was set up in October 1975, following student unrest at the college. Firecroft, and adult education college, was closed after students refused to recognize Mr Corfield as principal, and introduced their own education programme.

The committee's report labelled Mr Corfield a weak man who was "wrong for the job". The principal and tutors were blamed for most of the problems in the college.

The report called for the dismissal of the principal and staff, and added: "If any one of them stayed it would be inauspicious for the reopening of the college."

A new governing body has now been established, and there are hopes that the college may be reopened later this year.

Since the inquiry Mr Corfield has remained at Firecroft as warden of the college, but last month he announced that he did not intend to re-apply for the post of principal.

In their statement, the retiring governors say: "We have no wish to re-open any of the issues which so damaged Firecroft College during the dispute which broke out in 1975. We feel, nevertheless, a moral duty to the principal Mr Corfield, to put right what we believe to be the unjust appraisal of his character made by the committee of inquiry which looked into the dispute."

The statement adds: "He was criticized for lack of positive action during the dispute, but throughout the whole of this period responsibility lay with the governing body of the college, and Mr Corfield acted with their directions."

Since the dispute Mr Corfield has worked even more closely with the governors, it says.

"During the last two difficult and demanding years he has shown that he is capable of resolute and resourceful executive action.

"During the dispute the principal faced a vituperative and malicious campaign against his authority with dignity and courage. Since then, despite sustained provocation, he has promoted and maintained the highly successful educational programme of day-release courses for trade unionists, keeping the college in use and its administrative and domestic staff employed.

"His role in helping to negotiate the plan for the new Firecroft has required the ability to win people's confidence and trust, and to convey a vision of the future.

Commenting on Mr Corfield's personality, the governors say: "We have had to work with him under circumstances of the most intense strain and frustration, which have seriously taxed us all.

"We wish to give testimony to Mr Corfield's unshaken courtesy and consideration for others throughout this period.

"In the last two years, by his calmness and good humour, he has provided an example which has kept up the morale and loyalty of the staff in an environment of uncertainty and confrontation which could easily have demoralized them.

"In conclusion, we believe that if he could have been almost impossible to have kept the college open as an educational establishment after the dispute without Mr Corfield's services."

The statement is signed by Mr Christopher Cadbury, chairman of the governing body.

During the Government inquiry there was particular criticism of Mr Corfield's handling of a row over the right of students to administer capitation fees paid by their local education authorities.

Tories back secondment of teachers

by Simon Midgley

School staffing levels should be kept sufficiently high to permit teachers to gain industrial experience. The suggestion that teacher numbers should be pegged at a point which would allow secondment to industry for a term at a time was due to be made in a speech by Mr William Van Straubenzee, MP, on Wednesday.

In a prepared address to the National Union of Teachers National Education Conference in London he said that this would give teachers much needed experience of life outside the classroom.

"So many teachers have spent their whole lives in education, going from school as a pupil to teacher training college and then back to school to teach. This has resulted in many not fully appreciating the importance of the wealth producing sections of our society."

Mr Van Straubenzee also said that a falling birth rate was a heaven-sent opportunity to improve the teacher: pupil ratio.

Although the greatly reduced annual intake of teachers and the overall reduction of teacher posts would bring greater stability to schools, there would be a much bigger need in future for more emphasis to be placed on in-service training to improve the quality of the profession.

He also said that non-graduate women teachers who temporarily leave the profession to raise a family and unemployed non-graduate teachers may well find re-entry to the profession more difficult, if not impossible, in future.

This could be the consequence of the Secretary of State for Education and Science's announcement of her intention to discontinue non-graduate certificate of education courses after 1979 according to a report of the union's Advisory Committee for University Departments and Colleges of Education.

The report, due to be moved by Mr Frank Harris, lecturer in education at the University of York and vice-chairman of the committee, says that the problem of the non-graduate certificated teacher needs urgent consideration.

Although in-service one-year BEd degree "conversion" courses were available, these were usually restricted to serving teachers and would not help the unemployed or those who had temporarily left the profession.

"There should surely be a 'right by qualification' for such teachers to attend in-service courses as a means of up-dating their initial qualifications", the report says. The advisory committee would have to examine these issues very carefully in the coming year.

The report also refers to the joint meeting between National Association for Teachers in Further and Higher Education (NATFHE) and NUT education representatives earlier in the year as one of the most positive moves in teacher education that we have seen for many years".

The meeting, which discussed the unions response to the Green Paper *Education in Schools*, could be the first of a regular series of joint meetings. "Together we can be a formidable voice in teacher education and it is a voice which cannot and must not be silent in the critical years ahead", the report concludes.

NAS/UWT conference

Important thing is learning how to live

The thinking behind the Great Debate on education was questioned by Professor Tom Stonier of Bradford University who told the conference that the primary function of education should not be to teach a student how to make a living but how to live.

As Western countries moved more and more into the automated age, fewer workers would be needed and unemployment would go on rising, he said. This did not mean Britain would become poorer because it was a myth that wealth was only created by expanding manufacturing industry. "Knowledge creates wealth as well", he said.

Much of Britain's wealth depended on the knowledge-based industries such as pharmaceuticals. "Who paid for the students now working for ICI to get their PhDs", he asked. "Who paid for all that knowledge to understand the chemical processes and translate that into new products? Not ICI"

Britain's future as a wealth-producing nation lay in selling its knowledge and information skills. It could also develop new industries.

"What is shaping up is a modern, highly automated productive system which produces as much wealth using only 10 per cent of the labour force", he said. "This leaves 90 per cent to do what human beings really like best, which is to take care of one another in education, health and social services."

Teachers and their educators urged to stick together

by Lucy Hodges

It was time for a rapprochement between teachers and teacher trainers, Professor Richard Whitfield of Aston University, Birmingham told an education conference last week.

Teachers were wrong to hold trainers in such low esteem just because of the distance between teacher training establishments and the classroom, he told the National Association of Schoolmasters/Union of Women Teachers. "Please don't lump all trainers together any more than you would want all teachers lumped together."

Taking issue with comments made by Mr Norman St John-Stevas, the Conservative education spokesman, in an earlier speech, Professor Whitfield said he had learnt much more about teaching since he left the classroom. "If a wedge is driven between the profession and the training programmes this must in the end undermine the professionalism of everyone."

He called on the NAS/UWT to reconsider parts of its policy on teacher training and cited the cases of two former college of education lecturers who had 10 years' experience in the training system but could not now get back into schools "where their wisdom and skill and knowledge of teaching is required".

Professor Whitfield was not opposed to the principle of education college closures but to the way in which the policy was being implemented. Referring to the "carnage of the teacher education system", he said some of the mergers resembled shotgun marriages at least as bad as those forced on new comprehensive schools.

One problem was that the teacher education system was being used to regulate the supply and demand of teachers rather than other factors such as the pupil/teacher ratio. It had become a pawn in the hands of the policymakers and this was wrecking the stability of the system.

He was not, however, unethical of the teacher training system. "In terms of quality and control of skills, the national record is pretty abysmal", he said. "We must get teacher education akin to that of a medical school so that academic standards are improved and it becomes more professional."

The focus on teacher training must be on the classroom tasks of the teacher, on subject knowledge, skill knowledge and the curriculum rather that on the sociology and psychology of education. Theory was useful after students had some experience, but courses in, say, multiracial education could wait for in-service training later because it would not necessarily be appropriate for many aspiring teachers.

The teacher's job had become much more difficult, with children becoming more aware and parents more literate, especially as much more was expected of him. Yet a teacher's influence on a pupil was minuscule compared with that of the parents.—*TES.*

Cambridge buys Osea island

Cambridge University has bought Osea, a 325-acre island in the Blackwater estuary, Maldon, Essex, as an investment. The asking price was in the region of £500,000, but the actual amount paid has not been disclosed.

Mr Dodd appointed overseas adviser

Mr William Dodd has been appointed chief education adviser to the Ministry of Overseas Development, in place of Mr J. E. C. Thornton, who is retiring after seven years.

Mr Dodd, who is 54, was educated at City Grammar School, Chester and Christ's College, Cambridge. He has been a lecturer at the University of London Institute of Education, and joined the Ministry of Overseas Development in 1970.

Dr Steven Lukes

Dr Steven Lukes is a fellow of Balliol College, Oxford, and not an academic at Kent University, as stated in *The TIMES*, December 23.

ACADEMIC DEVELOPMENTS

Actresses help teach reproductive medicine

by Fred Kavalier

The drama of medicine has been given new meaning at Edinburgh University medical school. Three actresses are being used as "simulated patients" to teach reproductive medicine.

Students use the three volunteers to learn about reproductive problems which sometimes occur with "communication blocks" when the patient is distressed, angry or aggressively withdrawn and silent.

In such instances the Edinburgh teachers who have designed the exercise want the students to demonstrate their competence on simulated patients before being let loose on real sufferers. Another advantage is that rare clinical problems can be "created" to give students a wider range of experience than they would get using only real patients.

The actresses are each taught two complaints. They are given their details together with medical and social background and told to fill in any other details they think appropriate. Before they are released on the students they are tested by the teachers to ensure that their stories are both authentic and consistent with the supposed complaint.

Seven areas of reproductive medicine have been chosen to cover the range of problems which the students are likely to meet. They include problems of pregnancy, both wanted and unwanted, contraception, infertility, menstrual disorders, and sexual problems.

The consultation between student and simulated patient is concerned entirely with the patient's history: physical examination is avoided. Clinical "surrogate" patients have been used for gynaecological examinations in North America, but in Edinburgh the primary concern is to develop skills of communication so it was decided to avoid physical examination.

After discussions with the students it was decided that the simulated patients would sometimes be used without the students' prior knowledge. Sometimes after interviewing patients, both real and simulated, the students discuss their experiences with each other and with the simulated patient. Some interviews are recorded on videotape for viewing and discussion afterwards.

The use of simulators has been so successful that the department of obstetrics and gynaecology has now started to train simulated couples to present problems of subfertility. Suitable men have been found among clergymen and social workers.

In response to criticism that the use of simulators is unethical the Edinburgh teachers, Professor M. G. Kerr, Dr A. A. Templeton and Dr J. Parboosingh, say (*Medical Education*, November 1977) that the motivation is not to mislead but to help and inform. They believe simulated patients are ethically preferable to the alternative of making unfair demands on hospital patients.

Victoriana in Wales, and church history

Victorian studies with a Welsh emphasis is the theme of a new joint honours degree at Saint David's University College, Lampeter, University of Wales. The aim is to provide an interdisciplinary approach to the Victorian period similar to the medieval studies and renaissance studies courses which have been introduced recently at other universities.

Students will be able to choose four options from a selection which includes: Victorian Wales, the Victorians overseas, militarism in Victorian society, the scramble for Africa, and the literature of doubt. Teaching will be by staff from the departments of English, Welsh, history, philosophy and theology.

Victorian studies can be combined with any other joint honours subject in part two of the joint degree. The entry qualification is a part one pass in English, history, philosophy, theology, Welsh or Welsh studies.

Saint David's is also offering a new joint honours course in church history. It will be a part two course which will require a part one pass in both history and theology for entry. Students will choose four subject from the eight being offered. These include papers on the history and thought of Christianity, the English reformation, Christianity in Europe, and religious life and thought in Britain since the industrial revolution.

Both the Victorian studies and church history joint honours degrees will be offered from October, 1978. No additional members of staff have been appointed to teach either of the courses. Assessment in the courses will be based on examinations and course work.

Maths degree may be uprated

The chance to convert an ordinary mathematics degree to an honours degree is being offered by the department of mathematics at the University of Dundee. The course, which began in October, 1975, is preparing to accept its second batch of entrants in October, 1978.

The conversion course lasts for three years. The first two years are part time. In the third year students attend normal classes of the mathematics undergraduate curriculum full time.

Successful candidates are awarded the degree of BSc with Honours in mathematics. The course is open to applicants who have an ordinary degree including at least two consecutive courses in mathematics. It is intended primarily as an in-service course for teachers but other qualified applicants may apply. Applications should be submitted to Dr H. G. Anderson, Department of Mathematics, The University, Dundee DD1 4HN.

Working with ethnic minorities

A short course on working with people from ethnic minorities is being organised by the Midland region of the Central Council for Education and Training in Social Work. The course, which will consist of two three-day residential sessions, is aimed at senior social workers, experienced probation officers, field-work teachers, student-unit supervisors and training officers, and teachers on social work courses.

The main aims of the course are to increase knowledge and skill in working with people from ethnic minorities and to stimulate interest in this work.

The two residential sessions will be held at Herbert Gray College, Rugby, in March and May. The intervening period will be used for completion of a project. Application forms may be obtained from Mrs Edna Williams, Administrative Officer, CCETSW, Fourth Floor, Myson House, Railway Terrace, Rugby CV21 3HT. The closing date for applications is February 1.

● A workshop on theory and practice in certificate of qualification in social work teaching intended for social work tutors and practice teachers from field and residential social work is being held by CCETSW London and South East Team at Garnett College, Roehampton, from April 4 to 7.

The workshop will examine the roles and functions of tutors and practice teachers on CQSW courses with the aim of making closer links between college based and practice teaching. Staff from the faculty of humanities and business studies at Garnett College will participate.

Application forms from Jill Lanning, London and South East Region, CCETSW, Derbyshire House, St Chad's Street, London WC1H 8AD. The closing date for applications is February 4.

COURSES

Summer Course in Soviet Union for British Teachers of Russian 1978

It is expected that a Summer course will be held for British teachers of Russian in early August for 1 month in Leningrad. Participants will contribute £125 towards the cost of the return fare. No charge for accommodation, tuition or subsistence.

Forms and further information:

Lecturers in Universities and Polytechnics in the United Kingdom and Teachers in Schools and Further Education Institutions in England, Wales and Northern Ireland: Scholarships Department, British Council, 10 Spring Gardens, London SW1A 2BN. Teachers in Schools and Further Education institutions in Scotland: The Scottish Education Department, Room 4/41, New St. Andrews House, St. James Centre, Edinburgh EH1 3SY.

Closing date for receipt of application 3 March, 1978.

Scottish graduates in 1977 fare poorly in the job market

by Simon Midgley

Scottish graduates who qualified as history, geography, modern studies and economics teachers in 1977, fared particularly badly in the job market. More than half of those graduates who trained in these subjects were still unemployed in October.

This is revealed in a survey by careers officers of Scottish universities and central institutions of 687 graduates who completed a teacher training course in seven Scottish universities and Paisley College of Technology.

It revealed that the number of unemployed in the primary teaching sector rose slightly, while that in the secondary sector rose more markedly. Although there was no increase at all among mathematics, physics, business studies and music teachers, the percentage of unemployed would-be English, modern language, chemistry and biology teachers rose sharply.

As many as 51 per cent of history, geography, modern studies and economics graduate would-be teachers were still unemployed in October.

Of those who had been unable to find posts a significant percentage had temporarily given up the search and had, presumably, entered other occupational fields. Although only about half were still actively seeking teaching posts, only a very few indicated that they had abandoned all plans to become teachers.

The "success rate" in obtaining appointments in main secondary school subjects was highest in mathematics (98 per cent), chemistry (95 per cent) and physics (91 per cent). Among the least successful were candidates applying for posts in modern studies (45 per cent) and history (38 per cent).

Referring to the restricted entry to postgraduate teacher training courses during the 1976-77 session, the authors of the survey comment: "In view of the draconian nature of the cuts that were imposed, it is disappointing to find that the level of 'unemployment', where it has moved at all, has gone upwards.

"At the same time it needs to be emphasised that with the exceptions of teachers of history and modern studies the proportion of graduates successful in finding teaching appointments within three or four months of qualifying is always better than 60 per cent. Compared with some other occupational fields this is by no means a poor success rate."

Leicester may spend reserves

The financial prospects for the next five years are so bad that Leicester University may have to exhaust all its accumulated reserves, Professor Ralph Davis, its acting vice-chancellor, has claimed.

In the university's annual report for 1977-78 he says that faced with an expected 4 per cent cut in income for 1977-78 the university was forced to introduce economies last year both to make ends meet and help provide for "the dismal future".

The first decision which had to be taken was whether the necessary economies could be made without compulsory redundancies. Once it was decided that there would be no dismissals "the most stringent economies" were undertaken to produce a surplus of £150,000 in 1976-77 to help pay for the expected deficit in future years.

Staff salaries, which make up three-quarters of expenditure, were contained by carefully reviewing every vacancy that arose through resignation, retirement or death. Most were not filled, although Professor Davis points out that this has placed an unequal burden on some departments.

The good news at Leicester has been the flowering of its new medical school. Two new buildings, the medical sciences and clinical sciences buildings, proceeded more or less on schedule and the school enrolled its second intake of students in October 1976.

Leicester's total student intake remained virtually unchanged for two years apart from an increase in medicine. The trend towards two-subject joint degree courses continued but, Professor Davis reports, the single-subject degree, "whose demise has often been predicted", is still flourishing.

Professor Davis's report ends with a tribute to Sir Fraser Noble, who left the vice-chancellorship at Leicester in 1976 to become principal of the University of Aberdeen. "He left behind him a university greatly enhanced in national standing, and confident in the strength it gained over Sir Fraser's fourteen years."

Grants failure causes strain

The failure of the quinquennial system of university grants has caused serious strain, Professor G. D. Sims, Sheffield's vice-chancellor has warned. He says in the university's 1976-77 annual report that the failure has made forward planning increasingly difficult and that research of national importance had been affected.

Echoing the sentiments of other vice-chancellors, Professor Sims maintains that Sheffield has been progressively squeezed by lack of money and changes in policies over which the university sector had no control.

"In the early years", he writes, "some accommodation to the difficulty was possible by staff reallocation but where universities were already efficient in the use of their resources there was little scope for further saving. The last round of cuts has, therefore, been a matter of extreme concern, particularly where any 'fat' had already been shed, as at Sheffield."

The pressure to increase student numbers in higher education has been detrimental to research, which was particularly worrying to Sheffield where much research had a particularly national role, for example, in glass technology, fuel technology and metallurgy.

Professor Sims is highly critical of the Government's "arbitrary and ill-conceived changing of the basis of student fees". The Government must decide, he writes, "whether it wants mediocre higher education or a retention of excellence. Some universities are already approaching the end of the bridge between the two and unless the Government realises with more understanding the nation will be the loser".

On student fees the report notes that the university is continuing to pursue its long-term policy aimed at abolishing tuition fees.

It concedes, however, that few other universities believe fees should be abolished.

80,000 take CNAA courses

by Sue Reid

Student numbers on first degree courses validated by the Council for National Academic Awards rose to 80,000 in 1977, a substantial increase over the previous year, according to the latest statistics released by the Department of Education and Science.

The figures show that numbers on all advanced further education courses in polytechnics and colleges increased by 5 per cent last year, of which half was accounted for by the expansion on CNAA first degree programmes.

The newly established Technician and Business Education Council courses showed, inevitably, the most rapid growth, increasing their numbers by a third to nearly 18,000 in 1977. Enrolments on Higher National Diploma and university validated degree courses also rose by more than 1,000.

First-year enrolments on full time and sandwich courses went up by 3 per cent and by 2 per cent on part-time day courses. They rose by 2 per cent overall.

Across "all years" enrolments to full time and sandwich courses increased by 8 per cent and to part time day courses by 3 per cent.

However, there was a significant decline in the first year and overall enrolments to evening only courses which went down by 3 per cent and 1 per cent respectively.

North American news

Unique home for British art

[illegible] Yale's $35m collection of paintings from Britain

YALE

The new Yale Centre for British Art has rightly been called the finest collection of British paintings outside Britain—indeed, one of the finest anywhere. Housed in the splendid Louis Kahn building in the centre of New Haven, the collection is the gift of Yale's munificent alumnus, Paul Mellon.

Since it opened to critical acclaim in April, the centre has attracted a large number of visitors, students, critics, researchers, historians and academics. This scholarly attention is welcome. From the outset the centre was designed to be more than just a home for the $35m collection: it was to be the focal point for a whole range of British studies at Yale University. And to emphasize its academic role, the centre has now announced its first resident fellowship programme for the coming academic year.

The fellowship is open to senior scholars in the United States and abroad to study the centre's works of art and books and make use of its research facilities. Preference will be given to those interested in organizing an exhibition, writing a scholarly catalogue or conducting research into particular areas of the collection.

The value of the fellowship will depend on the applicant's qualifications but the centre has indicated that it is not short of funds for this programme: indeed, this was one of the conditions of the Mellon bequest. Recipients will be required to live in New Haven, and may be invited to lecture, teach courses or work informally with Yale students.

The centre's resources for academic study are enormous. It houses 1,800 paintings, 1,200 prints and drawings and 20,000 rare illustrated books dating from the late sixteenth century to the middle of the nineteenth century. It has classrooms for teaching, an art reference library, a comprehensive photographic archive of British art—including much that is scattered all over Britain and the rest of the world—and offices for visiting Fellows.

At the same time the centre's London branch, the Paul Mellon Centre for Studies in British Art, is offering a fellowship for a Yale graduate studying British art, to travel in Britain and Europe for a year. A number of other smaller grants will also be available for shorter periods.

In many ways the value of the collection is enhanced by being the personal choice of one man. There is very little beyond the dearth of Turner (though the centre does not confine its special exhibitions and academic interest to pre-1850 art); there are particularly good collections of themes Mr Mellon likes—seascapes, horses and animals, architectural drawings, sporting prints, Rowlandson drawings (which have just been on special display), and so on. And among the rare books there is a comprehensive record of British book illustration, life, culture and scenery and customs.

All this, the centre's director, Dr Edmund Pillsbury, believes, offers invaluable source material for research not only in art, but in literature, history, philosophy and any field relating to Britain.

Is there no conflict between the centre's function as a museum and exhibition area and its job of sponsoring and housing academic research? The director thinks not. The Louis Kahn building, acclaimed for its use of oak panelling, its intimate atmosphere and special glass roof that allows daylight into much of the building without direct glare, is also remarkable for the amount of space it sets aside for scholarship: lecture halls within the building, symposium rooms, areas for conferences and large meetings, and a fully equipped laboratory for the preservation and restoration of the paintings and books. Scholars do not trip over visitors; curators do not worry about academic intrusion into their preserve.

The centre has now begun a series of special exhibitions which are designed to focus attention on some aspect of its collection, or to bring to Yale works from other museums and collections.

As well as Rowlandson's cartoons, there have already been exhibitions of seascapes and of Victorian toys and games. This month there will be an exhibition of wildlife in British art—with the famous Stubbs's Zebra as a centrepiece—and in February 125 prints and drawings by Hockney will be on view. This will be the first display by a contemporary artist.

Such exhibitions are intended to keep as many works from the vast collection on display as possible, as well as stimulate research on the theme illustrated. Paul Mellon has set aside money to publish critical catalogues and research related to his collection. The centre is even encouraging graduate students to plan and organize their own exhibitions, using the centre's resources and galleries, and working out for themselves the problems of locating, arranging and presenting the paintings they want to include.

Although the Mellon collection is very much a collection of British art, the centre intends to get away from a strictly British framework by setting its works in a European context in some exhibitions, including works from continental contemporaries and tracing the influence of the British school in other painters.

Mr Mellon himself has definite likes and dislikes. In deference to these, the centre does not intend to devote its main energies to modern British art. He is still collecting pictures, and passing them on to the centre. In return, the centre advises him what would be most valuable to the collection. But as Dr Pillsbury says: "If he doesn't like something, he won't buy it. It's as simple as that."

Loan defaulters face big crackdown

from David Walker

WASHINGTON

Student loan defaulters owe the United States government $400m. Last month the Department of Health, Education and Welfare (HEW) announced it was reluctantly going to use strong-arm tactics to try to get the money back.

After a warning letter is sent out, private debt collection firms' agents will chase the 350,000 unpaid debts incurred by students in financing their education. The money was borrowed from banks and in some cases from universities under a scheme by which the federal government insured the debt.

The move by HEW's Office of Education is part of stock-taking of what one official called the "bafflingly complicated" system of grants and loans to students, some paid direct, some channelled through the states and universities.

In fact, the outstanding loan debt is a fraction of 1 per cent of the annual cost of student financial assistance from the Office of Education.

Student grants are also available through the Veterans' Administration and the social security department totalling several thousand million dollars a year.

The main programme of grants, however, has grown up along with HEW itself in the wake of the Great Society legislation inaugurated by President Johnson.

In keeping with the Great Society aim of aiding poor families, the basic grants scheme, which last year helped an estimated two million students, is strictly means-tested. Students from low-income families are eligible for a direct payment from the government of $1,400 or half the cost of attending the institution of their choice, whichever is the less. Last year nearly half the recipients of this grant came from minority ethnic groups.

The $1,400 must be seen in the context of fees and maintenance costs. In an average university an undergraduate on a four-year course will pay between $2,500 and $3,000 a year for tuition. Rent and food is between $1,500 and $1,800 and books and equipment between $400 and $600.

An undergraduate student from a disadvantaged background might qualify for various additional grant and loan arrangements made by the Office of Education. It is a frequent complaint of both students and the financial affairs officers employed full-time by most colleges that the system has too many confusing overlaps and requires a bewildering array of claims forms to be filled in.

Under a supplemental grants programme a poor black student, say, who was qualified to attend one of the elite universities might add to the basic grant. Under another scheme a student who was forced to help support himself by taking a part-time job might be helped. These two schemes last year cost together about $600m compared with $1,500m for the basic grants.

Additionally, the Office of Education administers two loan schemes. The Basic Loan Scheme, which last year helped nearly 800,000 students, was started when American politicians panicked at the end of the fifties at the sight of the Soviet sputnik. Called the National Defence Loan Programme it aimed to give loans to low and middle income families. The guaranteed loan scheme was started in 1968. It is this scheme which has caused the trouble.

The impact of such schemes is difficult to measure. Mr Peter Voigt, a senior official in the Bureau of Student Financial Assistance, emphasized that few students would be solely dependent on government funds.

Most would make up a "package", mixing their own money, money earned from part-time jobs, family contributions, scholarships, university aid and state and federal money. Last year about 3m students out of 11m in some form of post-secondary education received central government help.

Part of the stock-taking ordered earlier last year by Mr Joseph Califano, Secretary of HEW, will be to assess whether the various aid schemes do work. A first task for officials in recent months has been to collect the information from scattered sources. A second task has been internal reorganization of the gigantic bureaucratic machine of HEW itself. Next comes new legislation on grants to be introduced this year.

Black students complain that the loans scheme does not benefit them since they are traditionally considered a bad credit risk by banks and loan companies. Recently, too, there have been suggestions that middle income students are taking more advantage of the existing grants schemes—and so crowding out blacks and others who start with the handicap of knowing less about what assistance is available.

The reorganization and simplification of the grants and loans schemes of HEW could be threatened by a new cloud on the political horizon. Hitherto most of the schemes have been "selective" in the sense of being aimed at specific groups in the community—mostly low income families.

Now Congress is considering a proposal for a "universal" tax relief for the parents of students. In effect this would benefit middle income families most. The institutional wisdom of HEW is against such a move, though it would obviously be politically popular.

Meanwhile, the Bureau of Student Financial Assistance is tightening up on the loans scheme—again a popular move to judge by Congressmen's letters. Officials are sympathetic to the plight of students, however. Mr Leo Kornfeld, the bureau's director, said recently: "Under the system that now exists students must begin paying back the loans just at the time they are faced with marriage and trying to build a life. I wonder if that is the best time for the government to try to collect its debts."

Government Statistical Service
BASIC EDUCATION STATISTICS JANUARY 1978
for the United Kingdom



	1967	1974	1975
SCHOOLS			
Number of pupils (thousands):			
public sector schools	8,596.6	10,422.7	10,501.8
assisted schools	184.3	194.2	194.7
independent schools	463.6	443.0	446.5
total	9,243.5	11,060.8	11,143.0
Number of schools or departments:			
public sector	34,950	35,232	35,307
assisted	614	571	564
independent	3,516	2,695	2,570
FURTHER EDUCATION (thousands)			
Number of students			
full-time and sandwich	250.4	377.0	444.5
part-time day	817.4	812.4	829.7
evening only	2,306.3	2,681.8	2,842.8
total	3,374.1	3,871.0	4,117.1
Qualifications obtained[6]:			
Advanced courses:			
CNAA	0.5	7.8	12.2[6]
Higher National Diploma	3.2	8.9	10.2
Higher National Certificate	14.5	14.4	14.9
Non-advanced courses:			
Ordinary National Diploma/ Certificate	25.2	28.8	31.0
TEACHERS (thousands)			
Full-time teachers in all grant aided schools and establishments[7]:			
men	197.5	262.2	270.5
women	221.2	312.9	325.2
Part-time teachers in public sector schools:			
men	4.8	6.6	4.2
women	30.4	50.0	42.4
Students on initial training courses			
men	31.9	36.0	33.9
women	81.3	90.1	85.2
	1967	1974	1975
UNIVERSITIES (thousands)			
Number of students			
undergraduate full-time	169.6	208.1	218.1
postgraduate full-time	35.6	48.6	50.5
total	205.2	257.7	268.7
of which from overseas	16.4	28.0	31.5
undergraduate part-time	4.6	3.4	3.8
postgraduate part-time	14.3	22.9	22.6
Full-time teaching staff	25.8	32.1	32.2
PARTICIPATION IN FULL-TIME EDUCATION			
as a percentage of age group			
age 2–4 school[8]	*9.59*	*19.37*	*20.87*
16–17 school[9]	*24.47*	*34.66*	*35.74*[10]
16–17 non-advanced further education[9]	*5.53*	*7.83*	*8.28*[10]
18–20 school[9]	*1.91*	*2.25*	*2.31*[10]
18–20 non-advanced further education[9]	*1.76*	*2.89*	*3.25*[10]
18–20 higher education[9]	*8.23*	*10.53*	*10.50*[10].
students in higher education (000's)[9]	386.4	497.6	514.9[10]
OPEN UNIVERSITY (thousands)			
Finally registered new students	•	11.3	14.8
Registered continuing students	•	31.3	34.5
STUDENT AWARDS (thousands)			
New full-time awards made by:			
Local education authorities[11]	90.1	109.7	115.8
Education Departments[12]	10.4	14.6	10.7
Research Councils (GB)[9]	4.3	8.7	8.8
EDUCATIONAL BUILDING			
Projects started (£ million)	221.2	288.9	321.0
of which: schools	169.3	207.8	284.7
Completions	169.6	302.0	324.0
New school places provided (000's)[13]			
primary	265.7	232.2	183.9
secondary	146.2	226.8	185.2
FINANCE (£ million)[14]			
Education expenditure			
schools: nursery	4.8	14.4	21.8
primary	436.0	1,041.8	1,377.6
secondary	514.4	1,272.0	1,715.7
special	38.3	119.7	184.5
further and adult education	206.4	482.5	659.9
training of teachers (tuition)	42.6	100.7	126.4
universities	232.5	408.1[15]	541.0[15]
other education	62.6	156.8	211.8
total	1,536.3	3,665.8	4,818.8
Related expenditure	284.0	578.6	688.7
Total education	1,820.3	4,244.5	5,507.5
of which			
current expenditure	1,510.2	3,571.1	4,863.0
capital (from revenue & loans)	310.1	673.3	644.6

China

'Back to basics' trend grows

by John Gardner

The current university enrolment drive is unprecedented. It is officially estimated that over 10,000,000 people will be applying to enter university early this year. They must possess, as a minimum qualification, senior middle school graduation or its equivalent, but the "pool" of potential talent is a varied one as university enrolment committees are casting their nets as widely as possible.

Most applicants will be people who have left school since about 1970, and who have since worked in communes, factories, offices or in the armed forces. They must normally be no more than 25 and it is expected that the average age will be about 20. They must be in good health and unmarried.

Older candidates are also welcome, however, providing that they are academically qualified. The regulations specifically mention those who graduated from senior middle school in 1966 and 1967, for whom the age ceiling is raised to 30, and the single status requirement waived.

This group has been something of a "lost generation" in educational terms. Not only did it leave school just as the universities closed for the Cultural Revolution. It was also informed that its schooling had been contaminated by Liu Shao-ch'i and his "capitalist roaders".

Now, it would appear, it is officially recognized that the schools of the mid-sixties were not so bad after all and that those who passed through them might well be the sort of young people needed in China's great modernization programme.

At the other end of the age range, change has also been introduced. The insistence on two or more years of practical work as a prerequisite for university admission has disappeared. Recent school leavers are eligible to apply and so are students who have yet to graduate from senior middle school. Moreover, up to 30 per cent of university places will be reserved for such applicants.

The emphasis on academic ability goes far beyond simply having attained senior middle school graduation for, again in marked contrast a recent years, entrance examinations must also be passed. All candidates will be examined in politics, Chinese language and mathematics. Those applying for arts subjects will also have examinations in history and geography.

After the Cultural Revolution a system was instituted whereby applicants were screened by their work units, which would veto those whose class background or "political consciousness" was inappropriate.

Today, the units only carry out a preliminary screening to ensure that candidates satisfy the minimum criteria. Those who can are then given the entrance examination by the county authorities, and the examination itself is set at the provincial level.

The great majority of applicants this year will fail to obtain a place, for China's tertiary sector is extremely small. In 1965 there were 695,000 students but the Cultural Revolution stressed "universalization" of primary schooling at the expense of higher education and the present university population is only 600,000.

This year it is planned to admit 300,000 freshers—an impressive jump in percentage terms, but a small one in view of the millions wanting admission.

Less than one in 30 will be successful and this average disguises the fact that China's 400 tertiary-level institutions vary enormously in facilities and prestige.

Only about 43 are, in fact, "comprehensive universities", sizable institutions offering a full range of courses. Most are relatively small and specialized scientific and technical institutes, medical schools, teacher training colleges and foreign language institutes.

On completion of their courses, university graduates will, for the most part, be assigned to jobs by the state. In the past many were simply sent back to their old communes or factories, causing the Minister of Education in 1975 to remark acidly that there was little point in putting workers and peasants through university if they were simply to resume menial occupations thereafter. The "from the commune, to the commune" policy has been condemned rigid and doctrinaire; qualified manpower will now be assigned on a more rational basis.

Postgraduates are also being enrolled both in universities and institutes under the Academy of Sciences, which has the major research role. After the Cultural Revolution postgraduate training was minimal, as its "esoteric" and "elitist" nature made it a natural target for the anti-intellectualism of the Gang of Four.

Republic of Ireland

Major inquiry begins into student place needs

from our correspondent

DUBLIN

The Higher Education Authority (HEA) is undertaking a major review of the Republic's third-level student place requirements for the decade ahead. The review will take up to a year to complete and will set out strategies for future development and their cost implications.

The Authority, which is a statutory body, monitors growth in student numbers and recommends areas for state investment. This is the first time it has decided to carry out a large-scale review of future requirements.

In addition to a 10-year forecast, the HEA also hopes to do a further study on the country's third-level needs up to the end of the century.

The preliminary HEA work has already come up with startling figures on student place requirements which will entail massive state spending.

At present, there are around 35,000 full-time students in 30 higher education colleges, and it would appear that the country is in for a period of rapid, if not explosive, growth.

Ireland has a smaller percentage of students in third-level colleges than most European countries, where between one fifth to one quarter of the relevant age group is in full-time study. Up to a few years ago, about one-tenth of the Irish age cohort was in full-time third-level education and this has only gone up slightly.

The main growth in Irish education at the moment is at the second level. From the 1973-74 academic year to 1975-76, enrolments in this area shot up from 241,679 to 270,956. As the population keeps rising and more stay on at school after the compulsory period (six to 15 years of age), enrolments at the second level will continue to grow as will demand for places at third level.

Mr Sean O'Connor, Chairman of the Authority, said recently that, even allowing for a modest growth in participation rates at the third level over the next five to ten years, well over 60,000 places will be required.

To achieve parity of participation with its European neighbours, Ireland would require, not 60,000 but something between 70,000 and 90,000 places, he added.

It is expected that the HEA review will put forward some suggestions for areas of future expansion, and the bulk of the extra places are likely to be in the non-university sector. Already, there is talk of new-style community or regional colleges in towns without third-level facilities at present.

Dublin and its environs will need special treatment. As well as an increasing population, the Dublin region also has to make provision for an immigration of several thousand every year.

The population of Dublin is expected to rise from 852,000 in 1971 to around 1,150,000 in 1991. In other words, the region will contain about one third of the Republic's total population, and some of its satellite towns will be bigger than the second largest city of Cork. It is expected that the HEA will recommend that some of these satellite towns get local colleges of further education.

The HEA report is likely to prove a massive financial headache for the government which will also have to make provision for the continuing rising primary and second-level schools population.

Extra places cannot be provided overnight and several years of advance planning are needed. If the government continues to invest in higher education at its present rate, it will fall far short of meeting the growing demand for extra places.

South Africa

Science reputation 'remains high'

South Africa's scientists still enjoy a high reputation among their counterparts elsewhere, notwithstanding the controversy surrounding many of the country's policies, according to the South African Institute for Medical Research in Johannesburg.

In its annual report the institute points out that last year it was visited by a stream of leading scientists from Europe, America and Australasia.

West Germany

Legal ruling clouds issue of 'parental aid' obligations

by Günther Kloss

In a decision of June, 1977, the wider implications of which are only now emerging, the West German Supreme Federal Court decided that under certain circumstances the parents of a student are *not* required to make a parental contribution to the living expenses of their child even though they have been assessed for one under grant legislation rules.

The case was brought by the *Land* government of Baden-Württemberg on behalf of the federal government. The government is required by law to advance to the students the parental conribution which his or her parents refuse to pay until—after investigation of the individual case—the amount can be at least partially recovered from the parents, if need be on the basis of a court ruling.

Since there have been many such cases and regional courts have differed in their judgment the Federal Court's decision will clarify the situation.

The case in question concerned a student who after school had completed training for an executive grade Civil Service career but subsequently decided to read law at university.

Under the German Civil Code parents have a legal obligation to provide for the maintenance of a child during the appropriate period of life or her education and training for a job. Only if they are unable to do this will the government provide a grant.

The Federal Court ruled that in this instance the parents had properly discharged their duties by assisting their son during his first period of professional training. A further obligation would only have arisen if during this stage some previously undetected, particularly strong inclination and ability for a more academic education had emerged.

However, neither this nor any other special reason—for example, the need to change a career for health reasons—applied in this case. It therefore fell upon the government to help the student.

The judgment is of particular significance for those students who come to university via the "second education route", that is, after practical training and completing a course at an advanced vocational college.

Australia

'Voluntary membership' threat to union

from Robert Milliken

MELBOURNE

The state government of Western Australia has passed legislation to outlaw compulsory student unionism and to inhibit student money going to the national student body—the Australian Union of Students.

It is the first move by an Australian government to make student unionism voluntary, and could later be followed by some other states —notably Queensland—who are unhappy about the AUS's support of some left-wing political causes. The move has been attacked by both student and academic leaders alike.

For the AUS, the effects could be drastic. It has 250,000 members around Australia, whose affiliation fees in 1977 gave it a budget of A$714,000 (£440,000). The loss of affiliation fees from West Australian universities and tertiary colleges would be more than A$55,000 (£34,000).

The legislation states that membership of student guilds or unions shall not be compulsory, and that no academic rights or privileges shall be denied to students who choose not to be members. However, every student will still be required to pay a compulsory service fee to be collected by the university authorities.

In the past, this money has been passed on to the student unions for distribution as they see fit; but the legislation now decrees that the money shall be applied solely for the provision of services "or the development of cultural, social, sporting or recreational activities directly related to the university."

The West Australian conservative Liberal government's move follows its passing of "right to work" legislation in 1976 which outlawed compulsory unionism in general; but it is also the culmination of that government's long dislike of the Melbourne-based AUS and its political activities.

The socialist AUS has experienced possibly its greatest political crisis over this year, with the moderate left leadership coming under a series of virulent attacks from both Maoist and right-wing student groups.

At times, the faction fighting erupted into violence which culminated in the sacking of the Maoist editor and staff of the AUS newspaper, *National U*, in August. The paper has not appeared since then.

AUS was further rocked when its student travel company went into temporary liquidation in after disclosing trading more than A$1m for the year. AUS Travel has also trading again under a sub-arrangement in which its fin airline creditors—Qantas, Ansett Airways, Thai International, Malaysian Airline System and Australia Airlines—have agreed a moratorium on their debts four years.

But the entire exercise provided further ammunition the AUS's right-wing critics to unbush the union with de financial mismanagement.

The same critics attack the that a proportion of the AUS get (3.6 per cent) has been to campaigns supporting political causes, such as the nationalist movement in East and outlawed student groups Thailand.

However, the vice-chancellor the University of Western Professor Alan Boyle, said a rather frightening prospect university, by nature a rather and enduring institution, the future its basic structure will pend on the philosophy of the tical party that happened power at the time."

Mr Peter O'Connor, presi the AUS, said the legislation an attack on student autonomy described it as akin to th Singapore and Malaysia where our organizations are suppressed.

Student leaders are now legal advice as to where this in view of the fact that at the University of Western tralia in 1976 voted to remain affiliated to AUS. Already, it suffered a loss of A$ affiliation fees from the reces sion of one of its biggest s the New South Wales Institute Technology.

Even bigger ramifications pected from a decision by the tourina Supreme Court in Mc which decided in favour of against student unionism by a group of students fr University of Melbourne.

The court ruled in favour challenge to the right of to the AUS and to the right to spend the money on certain tical courses. The decision thrown student unions into sion, and the full implications not be known until it is the start of the new academic in March.

Reinforce our two pillars of wisdom



Steven Muller

These days are gone, and most of us will say good riddance. It is no longer the business of the university to restrict its services to a privileged minority, nor to produce—having aside the male chauvinism of the term gentleman—a well-educated social and economic elite.

But a university education that fails to transmit the values of civilization is a devalued education. And mass democracy needs educated participation and comprehending commitment to social values not from an elite but from the majority of citizens.

The fate of contemporary democracy depends largely on the degree to which citizens are highly civilized. To the degree most of them are not, their lives will indeed become so nasty, brutish and short as to call forth a new *Leviathan*.

A democracy of the ignorant becomes a tyranny of stupidity. A democracy of gifted restrained only by competition is no more than the tyranny of corruption. A democracy of unlimited self-indulgence will collapse because of its sheer and paralysing inability to face and solve real problems.

No good society is possible without justice, discipline, self-restraint, and compassionate self-understanding. A less-than-good society can function with little justice, no compassion, and no self-restraint as long as its rulers can maintain iron discipline.

Without discipline no society is possible at all. A good democracy is possible only when the large majority of citizens have learnt to practise civic virtues on a voluntary basis. That in turn is impossible without education, because civic virtues are learnt, not inbred.

University education for the many is needed in modern democracies for these reasons. The university must now educate all of its students as it once educated only the elite, transmitting the values of civilization as well as vocational and professional training. More, not fewer, citizens need university education, and that education must offer more than preparation for employment.

One second point about university education is closely related. It is simply that a broadly based liberal university education—necessary for the preservation of democracy—also offers the best prospects for future employment. The argument here is that employment prospects for university graduates are insufficient more because these graduates are too narrowly trained than because there are too many of them.

In recent years universities have prided themselves on curricula that became constantly more specialized and specifically pre-professional, in increasing variety. This development appeared to suit the employment needs of highly diversified technologically advanced societies.

But now it is becoming apparent that the speed at which knowledge is continuing to advance—and at which technological innovation continues to proceed—greatly exceeds the ability of university curricula to keep pace.

The accelerating rate of contemporary scientific development, which itself led to the fragmentation of university curricula into ever more specialized compartments, is today rendering counter-productive the very educational strategy that first evolved to respond to its manifestation.

The graduate who leaves the university today, at the very narrow but finely-honed cutting edge of highly specialized pre-professional training, faces the prospect that within a decade most of what he or she knows best will already be obsolescent. Very likely the terms of his or her employment will undergo radical change. New knowledge will have to be rapidly absorbed so as to adapt.

The graduate and his or her employer will then judge the earlier experience of university education less by the skills commanded at graduation, and more by the foundation laid for a continuing life-long process of further learning and professional adaptation.

Already some employers are giving evidence of less interest in recruiting persons fundamentally well educated in a general sense, who can then continue to acquire specialized knowledge on the job, in preference to hiring highly trained specialists whose specific knowledge dates too quickly and who may have subsequent difficulties in making professional transitions.

It is also obvious that specialized vocational and professional university curricula become less attractive when many students enrolled in them have diminished prospects of finding the specific employment for which they are being trained.

In fact, such negative expectations on the part of students have an adverse effect on university education. They discourage motivation and thereby tend to produce diminished performance as well as lower standards.

Taking these two points together would indicate that universities in the Western democracies are not producing too many graduates, but rather too many whose education is misdirected. Even more, not fewer, citizens should attend university, so as to acquire advanced education both in the values of civilization and in knowledge directly applicable in the economy.

The goal of producing a university graduate who is a finished specialist in a chosen field should be unmasked as illusion. Instead the universities should strive to restore fundamentals to their curricula as a matter of first priority. By so doing they will more effectively preserve the democratic order on which university freedom itself depends.

They will in addition serve better the economic interests of society, of their graduates, and of the universities themselves. Lifelong return to the universities by graduates, to learn new knowledge on the basis of a sound foundation initially acquired, offers a future prospect worth anticipating.

The author is President of Johns Hopkins University.

New Zealand

UGC to vet closely proposals for all new courses

from Lindsay Wright

WELLINGTON

New course proposals from the universities are to come under more exacting scrutiny by the University Grants Committee in an attempt, according to UGC chairman Dr Alan Johns, to ensure that the best use is made of resources in the system as a whole.

In letters to all vice-chancellors, Dr Johns said that the UGC had been considering the way in which the universities have been introducing academic developments through widening existing courses, and offering new courses at certificate, diploma, degree and postgraduate levels.

"All proposals received have been accompanied by the customary assurances that no certificates are required indicating that special grants will be needed to support them. But these assurances have been given at a time when the universities are finding their resources restricted by rising prices and the UGC has before it applications for increases in the block grants for the remaining two years of the current financial quadrennium.

"While it may well be that individual courses do not require special funding, it is hard to believe that the numerous proposals in total will not be committing considerable extra expenditure after the current approval of block grants expires in March, 1980."

The UGC has asked to be informed as early as possible, and in much detail as possible, of proposed academic developments which involve the introduction of new courses for certificates, diplomas, degrees, or new courses leading by additional stages to existing degrees or diplomas.

It is expected that [illegible] assessment could involve discussions with the university concerned and other interested universities, educational bodies and professional associations involved. The UGC would also consider recommending to the universities whether they should proceed in their own form or in some other way.

The Grants Committee also warns that the new procedure will inevitably mean delay in the introduction of some new courses.

Dr Johns claimed that the Curriculum Committee had not received a number of requests for courses which had been widely offered in the technical field and by which might more appropriately be offered by them.

"As well as those proposals which may have implications for the tertiary system as a whole, parts of the Curriculum Committee receives proposals from a single university that could have marked and possibly adverse effects on the work of the other institutions in the university system."

Appointments

Universities

University College, Swansea

Lecturer: E. J. Owens (classics and ancient history).

Colleges

London College of Printing

Head of school of graphic reproduction: Peter Payne.

General

The Royal Society has appointed the following vice-presidents: Dr B. J. Mason, Sir Hardie Massey, Professor D. C. Phillips, Dr M. G. P. Stoker, Professor P. Allen, Dr G. D. H. Bell, Sir Angus Paton and Sir Peter Swinnerton-Dyer.

Sir Maurice Yonge, honorary fellow in zoology at the University of Edinburgh, has been appointed Royal Society inter-university visiting professor at the University of Hong-Kong under the scheme to help scientific interchange between the United Kingdom and Commonwealth.

Mr Richard Griffiths has been appointed theatre director at the Royal Northern College of Music from January 1, 1978.

The following have been newly appointed to the Business Education Council: Mr F. J. Briggs, Norcros Ltd; Mr R. Frank, Charles Thackray Ltd; Mr Ravi Pal, Rank Xerox Ltd; Sir Peter Tennant, Barclays Bank International; and Mr D. P. Wratten, Telecommunications Personnel. Further appointments to the newly reconstituted Council are: Mrs Pat Turner, General and Municipal Workers' Union; Mr F. J. Bell, Iron, Freighthiners Ltd; Mr P. D. Ball, Hastings College of Further Education; and Mr M. Norman, York College of Arts.

Recent publications

Audio-Visual Materials for Higher Education 1977 is the third edition of the British Universities Film Catalogue. It gives information of 700 titles not previously listed and certain categories of specialist medical material excluded from the second edition (published by British Universities Film Council Ltd, Royalty House, 72 Dean Street, London W1V 5HB, £10.50).

Open University programmes January 7 to 13

Sunday January 8

BBC 2

10.05 Arts: Prospect—A Programme for Students and Tutors of Arts.
10.30 Open Forum: Induction I.
10.55 The first years of life: On the Way (1901): Song 11.

RADIO 4 (VHF)

8.50 A Month to Go.
9.00 OU Announcements Music Flit.
10.10 The pre-school child: Talking to Each Other (1902): Prog 2.

Thursday January 12

BBC 2

6.45 Arts: Prospect—A Programme for Students and Tutors of Arts.
7.10 The pre-school child: Give and Take (1902): Prog 11.
8.35 Open Forum: Induction 1.

Friday January 13

RADIO 3 (VHF)

8.30 A Month to Go.
9.00 OU Announcements Music Flit.
9.10 The first years of life: Attainments and Problems: Thinkers and Wives (1901): Prog 11.

† repeated programme

Fellowships

London School of Economics

The following have been elected fellows: Professor Sir Roy Allen, emeritus professor of statistics; Dame Margaret Cole, president of the Fabian Society; Mr Anthony Lancelot Dias, former Governor of West Bengal; the Hon Mr Justice J. E. Isaac, deputy president, Australian Conciliation and Arbitration Commission; Professor Clark Kerr, chairman of the Carnegie Commission on Higher Education; Professor Oliver Ross McGregor, professor of social institutions and head of the department of sociology, Bedford College, and chairman of the Royal Commission on the Press; Mr William Pickles, former leader in political science; Dr Majorie Plant, former deputy librarian, British Library of Political Science; Professor Kingsley B. S. Smellie, emeritus professor of political science.

Grants

Leeds University

Plant Sciences—£17,234 from the ARC for an investigation into the development of vesicular-arbuscular mycorrhizal infection in selected field crops and its effects, under the direction of Dr F. E. T. Sanders; £10,000 from the Grassland Research Institute for Grassland manuring (GN23) experiments under the directions of Professor H. W. Woolhouse.

Transport studies—£15,970 from the SRC for a project on estimation of O-D Matrices from traffic counts, under the direction of Dr D. Van Vliet.

Mechanical engineering—£14,889 over two years from the SRC for a project on fundamental studies of explosive and continuous stratified charge combustion, under the direction of Dr D. Bradley.

Electrical engineering—£67,641 from the SRC for a project on scale model studies and dynamic performance of superconducting AC generators, under the direction of Professor P. J. Lawrenson and Dr J. M. Stephenson.

Ceramics—£17,900 from the SRC for a project on interface studies in ceramics, under the direction of Mr T. G. Carruthers; £14,180 from the SRC for a project on mass transport in ionic solids in the extrinsic-intrinsic transition region, under the direction of Professor R. J. Brook.

Textile industries—£25,900 from the SRC for a project on high resolution studies of paracrystalline structure in fibrous polymers, under the direction of Dr D. J. Johnson and Dr M. G. Dobb.

Animal physiology and nutrition—£12,747 from the ARC for research on autoregulation of the availability of dietry phosphorus by ruminants, under the direction of Professor A. D. Care; £23,065 from the MRC for research on the control of vitamin D metabolism in large mammals and birds, under the direction of Professor A. D. Care; £14,029 from the ARC for research on influence of feeding patterns on biological efficiency of high yield dairy cows under the direction of Mr C. L. Johnson.

NOTICE BOARD

Forthcoming events

"Southern Africa: isolation or Independence", a series of lectures organized by the department of extra-mural studies in association with the School of Oriental and African Studies extra-mural division will be held at the Library Association, 7 Ridgmount Street, from January 23 to March 6. Professor J. R. Gray, professor of African history at the University of London, will give the first on "Southern Africa in Perspective: The Roots of Isolation". Fee: £3.50. Inquiries to the special courses section, department of extra-mural studies, University of London, 26 Russell Square, London WC1B 5DQ.

* * *

"Six Modern Poets", a series of lectures with readings, will be held from January 25 to March 1 in the lecture room at the department of extra-mural studies, University of London, 26 Russell Square, London, WC1. Professor Christopher Ricks, professor of English in the University of Cambridge, will discuss Philip Larkin on January 25. Other poets will include Ted Hughes, Robert Lowell, Geoffrey Hill, John Montague, and Seamus Heaney. Fee: £3.00.

* * *

"Britain and the Continent: the influence of architectural style", the annual symposium of the Society of Architectural Historians of Great Britain, will be held on March 4 in the Society of Antiquaries, Burlington House, London. Open to non-members. Details from Dr Peter Willis, School of Architecture, University of Newcastle, Newcastle upon Tyne, NE1 7RU.

"The End of Roman Britain" a weekend conference organised by the department of archaeology of the University of Durham will be held at Hatfield College on March 17-19. The conference will be concerned with the evidence from the main regions of Britain for the transition from Roman rule to British or Saxon domination. Fee: £20. Further information from Mr John Casey, department of archaeology, Durham University, 46 Saddler Street, Durham DH1 3NU.

* * *

"Atheired The Unready Millenary" a conference organized by the department of extra-mural studies at the University of Manchester, will be held at St Edmund Hall, Oxford University from March 15-17. Speakers include: Ms Pauline Stafford of Huddersfield Polytechnic on the general significance of power structures. Fee: £25. Further details from David Hill, department of extra mural studies, University of Manchester, Manchester M13 9PL.

* * *

"Establishing International Understanding through FE" a study conference organized by the Council's Lodge Further Education Staff College, will be held from March 19-22 at the college. The conference will discuss the UNESCO recommendation made in 1974 on the ways educational authorities and institutions can promote education for international understanding. Fee, £20. Further information from The Registrar and Clerk to the Governors, The Further Education Staff College, Coombe Lodge, Blagdon, Bristol BS18 6RG.

Honorary degrees

Edinburgh

MD: Professor N. A. Mitchinson, Jodrell professor of zoology at University College London.

Leeds

DSc: Dr George A. Salmon, director of the Cambridge Radiation Research Centre; Mr Geoffrey Carlton Parnell, head of the photographic physics group of the research division of Kodak Ltd.

MD: Ms Margaret Ellen Hodson for her work on immunological features of cystic fibrosis, and Maurice Hyman for his work in developing a new technique for the investigation of low density lipoproteins patterns in health and disease.

Loughborough

DSc: Sir Paul Reilly, director of the Design Council.

D Litt: Professor Jean Lafay, director general of national scientific and technical relations at the French Ministry of Foreign Affairs.

COURSES

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Manchester's adult literacy scheme has been described as a failure, as Maggie Richards reports

End of term adult reading report. Result-inadequate

Three years ago, Manchester's education committee responded enthusiastically to the challenge of the new adult literacy campaign. Literacy classes were provided at each of the city's adult education centres, and an approach was made to the Adult Literacy Resource Agency for funds.

But the effort has foundered, according to a report published by the city's literacy tutor coordinator, Jane Jeffery, and research worker Chris Maglin. They say: "The literacy scheme only scratches the surface of the problem. We reach only a small fraction of the estimated number of people with literacy problems. The majority of those who need help do not approach either the statutory or voluntary organizations."

The report, "The Failure of Literacy Provision in Manchester", has now been placed before the city education committee's literacy council, and is likely to be discussed shortly.

It cites one centre in a deprived area with a high referral figure for literacy students where "the students all appeared to be being treated as 'slow learners'. They had phonic-based infant school reading books. Some of them were simply copying out pages into exercise books. There was a heavy silence and feeling of inertia.

"The attitudes of both the head of the centre and the class teacher was equally patronizing, and the students were referred to as 'these kind of people' and 'these difficult people': individuals who were supposedly 'dumb'" were pointed out in an open, acerbic manner.

The report adds: "We believe that those students who stay in this class are those who are prepared to accept the teacher's view of them as inadequate and 'not very bright people'. The rest vote with their feet."

Students, the report says, felt they could not overcome the rigid structure of their classes to confront their tutors about problems they were encountering or the relevance of the learning material.

The authors of the report say their own visits to some of the classes in Manchester's 16 adult education centres confirmed the point made by students about atmosphere, attitudes and practices. "The attitudes towards literacy students which flourish in some of the centres are apparent to some degree in all of them. The entrenched attitudes and prejudices of the 'educator' playing his superior role are out of place in the context of any 'learning' relationship, but the consequences for adult literacy are disastrous."

The report also examines the complaints made by students and former students. More than 50 former students were interviewed, one, whose aim in attending literacy classes was to distinguish between varieties of tinned foods in a supermarket, found herself trying to read a passage on Alcock and Brown. She said: "It was like being back at school. The desks all faced forward and the teacher stood at the front."

A student at another centre reported: "I was asked to read out loud from a book I didn't know and I couldn't take it. I didn't go again."

In another instance a student replied: "Sometimes we had to all chant aloud from a blackboard, like kids. I felt embarrassed." The same student added: "Not enough time was spent with the teacher in the class. At tea-break, which lasted half an hour, the staff all sat separately from the students."

The report also records the reactions of one student who had learnt to read the names of chemical compounds associated with his work, but who was failing in his course work. He had gained nothing from his four months' attendance at literacy classes, he said, but blamed himself for being "a bad scholar".

Comments such as these were echoed again and again by former students, the report says. But in every case the student had made an attempt to relate any of the issues with the tutor. Students felt they were at fault.

Says the report: "The tragedy of the situation is that it takes enormous courage and strength of purpose to ask for help." Anyone who has listened to people talking about 'feeling sick inside' or maybe taking 'six months to screw up the courage to ring again' after not being able to contact the BBC referral number . . . can at least imagine something of the feeling."

If such students are forced to drop out they instinctively blame themselves, according to the report. "Most students and ex-students blame themselves for not 'fitting' into the provided slots and conclude that they will never learn. Few of them question the rigidity of a structure that cannot accommodate them."

The report also examines the tutors' views. In one class, where students had complained of having to work with school books and irrelevant material, the teachers felt any shortcomings could be met by "more graded readers and exercise books".

Tutors at this centre related the student drop-out figures to domestic circumstances and the illness of participants in the scheme. "But we know this isn't so, particularly at this centre, where the number of referrals immediately contacting us for alternatives or even refusing to go there initially because of its reputation locally is significant", the report says.

In another centre the authors found "a great deal of lip-service paid to meeting adults' needs and, one felt, a genuine concern about those students who had withdrawn. Yet there was no evidence in the classes that students' real needs were being met.

"Most of the tutors were teachers with infant school experience, and most of the material was school-based. There were students reading lists of words aloud, and students copying pages out of infant school reading books."



Particular needs and motivations are largely ignored.

and motivation of the student, largely ignored or subordinate administrative convenience. Teachers tend to be appointed on criteria of professional qualifications, and there is an all-pervasive atmosphere of patronization; it is evident, particularly, in a narrow view of what is considered to be 'relevant adult matter'."

"There is a lack of future, the concept of real student participation in any role other than that of the passive and slightly guilty (i.e 'less educated') consumer is not really surprising that large numbers exercise their right to remain outside or to disappear quickly from a situation which delivers such a message."

The report sets out an eight-point plan for the introduction of an alternative system of literacy provision in the city.

Literacy budgets should be assigned to a central team of tutor-workers who would be responsible for coordination, administration, communication, allocation of resources, and acting as a referral point, it says.

A shift away from educational institutions is also recommended. Community groups such as tenants' organizations, or claimants' unions would become responsible for literacy provision, and all links existing with the education system would cease.

Paid group workers would be employed, and their posts funded from the central literacy budget. Initially these group workers would be trained by the central team of tutor-workers, but eventually each group would be expected to train its own members.

The aim of the group workers would be to create an atmosphere in which all members of the group were concerned in helping each other to learn. It would be recognized that the group workers were also participating in the learning process and were not simply "teachers".

Groups would be encouraged to meet as often and for as long as they chose, with or without the presence of the group worker. The group would work towards being a democratic body, concerned about the welfare of every member.

"We believe that the basic premise on which the present provision is founded is a false one, and that change that is needed is a far more fundamental and far-reaching one than can be achieved by modifications or discussions which accept such distinctions as 'teacher-student, expert and novice, giver and recipient'," the report says.

"We aim to present a simple and effective philosophy. It is neither reformist or radical, although it has been called both."

The failure of literacy provision in Manchester, from Manchester Education Offices, Crown Square, Manchester M60 3BB.

The report criticizes the lack of coordination in Manchester's literacy provision. While the city's education committee is responsible for literacy provision at adult and further education centres, one-to-one tuition is sponsored by the Council of Voluntary Service Literacy Project, and takes place in the home or in reading clubs—many of which are also held in educational institutions.

"We believe that the present hierarchical pattern of 'classes' being 'provided' in 'education centres' would not bear too close an examination in terms of the opportunities it offers for learning and sharing anything—but when one attempts to impose this structure on the infinitely variable and less readily definable area of 'literacy' provision, its lack of relevance becomes painfully apparent", it says.

The autonomy of each adult education centre is also questioned: "The full-time literacy workers cannot use their acquired skills and experience to influence the quality of provision in anything other than an advisory capacity, and that advice is not readily sought, or accepted in a climate of isolation and defensiveness."

Of the existing literacy provision in the adult education centres, the report says: "The particular needs

Fred Kavalier examines the debate over what electron microscopes really show

Harold through the looking glass

The byways of science are littered with the debris of exploded theories. Once, for example, it was a well known fact that life arose spontaneously under certain sordid conditions. Proof of this eminently reasonable theory was provided by putting a pile of dirty linen in a loft or basement. Within days mice appeared, apparently spontaneously and without any evidence of having been born or produced in the usual way. At the time, those who questioned spontaneous generation were heretics.

Today's heretics have to be more astute. One such man is Dr Harold Hillman, reader in physiology at the University of Surrey. He believes that three of the accepted features of living cells simply do not exist. The unit membrane, the endoplasmic reticulum and the nuclear pores are, in Dr Hillman's considered opinion, artefacts. An artefact is something which appears under the microscope (in this case the electron microscope) which is not present in the living cell. Artefacts are produced by the numerous processes which living cells have to undergo to make them visible under the microscope.

Few people agree with Dr Hillman, and of those who do none is prepared to stand openly in the face of the torrent of abuse which frequently greets Dr Hillman's ideas.

To understand Dr Hillman's artefacts it is necessary to go back to the good old days when people looked at cells through ordinary light microscopes. With these it was possible to see most cells and some of the larger intracellular structures, the organelles. The resolving power of light microscopes, that is the power to distinguish two objects lying close to one another, is limited to less than one-thousandth of a millimetre. Although this is very small by most standards it does not permit study of Dr Hillman's three artefacts—the unit membrane, the endoplasmic reticulum, and the nuclear pores.

To see these it is necessary to use an electron microscope. With electrons rather than visible light the resolving power of the microscope is increased enormously. While light microscopes are rarely used for magnifications greater than 1,500 times, electron microscopes can provide magnifications of 100,000 times or more.

When cells were first looked at under electron microscopes new things appeared, among them Dr Hillman's three artefacts. Specimens for the electron microscope have to be specially prepared, and it is a well recognized fact that the image one sees is different from the living cell.

But the crucial question is: Does the electron microscope consistently produce pictures of "objects" which do not exist? Dr Hillman thinks it does, and spends a great deal of time lecturing and showing a film which tries to explain why.

Think of the inside of a cell, the cytoplasm, as orange juice, he says. If you put a drop of orange juice on a glass slide and dry it, it forms a pattern which bears no consistent relation to what is actually in the juice. If you then study it and subject it to all the preparation required for electron microscopy, it may even look like endoplasmic reticulum. Similar results can be obtained with a solution of inorganic ions, potassium chloride for example.

Dr Hillman also believes that the structure of the endoplasmic reticulum is geometrically impossible. Why, he asks, are the membranes of the reticulum of uniform thickness regardless of the plane in which they are cut? He sees this geometric argument as his strongest objection and, after being turned down by many of the most prestigious scientific journals, is now about to publish his case in *Perception*, a journal more at home with psychology than cell biology.

Dr Hillman argues that whether the endoplasmic reticulum is a "net" or "flattened vesicles" it should sometimes appear in oblique or transverse section if it is randomly orientated throughout the cytoplasm. It is rare, he says, to see views published other than the familiar picture of equally spaced parallel lines.

Electron microscopists respond to this by saying that only the best and most illustrative pictures are selected for publication. But Dr Hillman does not accept this. He says he has openly challenged electron microscopists to produce the goods and they have failed.

Of course it is nothing new for traditional ideas in science to be attacked. The usual venue for such attacks is the pages of the scientific journals. Indeed, six members of the electron microscope section of the Royal Microscopical Society recently suggested that Dr Hillman should put his detailed arguments in print.

This he has tried to do, but without success. From the shelves of his office at Surrey he takes a veritable sheaf of correspondence with journal editors. In the end the answer is always the same. The letters are always polite, and Dr Hillman replies assiduously to criticisms with point by point explanations—but all to no avail.

He has expanded his work into a book, but finding a publisher is still a problem. The reason, Dr Hillman believes, is that his ideas are too damaging to the establishment.

Dr Hillman says that publishers have admitted to him privately that his book would damage their lists, particularly if they publish other books on cell structure.

Endoplasmic reticulum is not only object of Dr Hillman's criticism. He applies his geometric arguments to the nuclear pores, tiny holes which appear on electron micrographs to connect the nucleus to the cytoplasm.

These pores, he says, are too small in form both in diameter and shape to be real. He believes their diameters should vary between zero and maximum depending upon how deep they are in the section being studied. And if they are as big as they appear in electron microscope pictures, why does the nucleus not leak into the cytoplasm or vice versa?

Bubbles or cracks in the nuclear membrane are Dr Hillman's favourite most likely explanations for what the microscopists call nuclear pores.

Finally, Dr Hillman thinks that the unit membrane, the perimeter of the cell which looks like a "railway sandwich", is an artefact. He accepts that there is a cell membrane, but thinks its appearance is due to the preparation of the tissue after the section has been cut and does not accurately represent the cell membrane.

Dr Hillman is confident that his ideas will one day be accepted. But meantime he is anxious to shake up the complacency which he believes to be present among people who study cells. He would like to see more controlled experiments which, he thinks, would confirm his own views on cells.

Until the day when his views are accepted he is prepared to carry on swimming against the tide of the scientific establishment.

British go feet first into European institutions

The fortifications which made the City of Luxembourg into a strategic centre in Europe were demolished over 100 years before the construction began of a new complex on commanding heights over the city on the Kirchberg Plateau.

This is the Centre European housing the Secretariat of the European Parliament, one of the chambers of this peripatetic assembly, offices of the European Commission, and the Court of Justice.

The city has assumed a new strategic importance as one of the two main centres of the European Community and is increasingly attracting people from other Community countries, yet here as in Brussels, within the middle ranks of these European administrators the United Kingdom is significantly underrepresented.

At the highest level the balance of nationalities is preserved and the member governments are most concerned to see to it, but at the intermediate administrative and executive level Britain seems to have failed to make the most of the opportunities.

Why is this and what is the role of higher education in equipping students with the managerial skills to follow a career in an international (or supranational) organization?

Some may argue that the departments of language already carry out part of that role and certainly the acquisition of linguistic skills is vitally important.

The graduate who has completed these three or four-year courses should possess skills of literary criticism, and may or may not possess spoken fluency in the chosen language, but he is unlikely to possess a profound understanding of the institutions of the country concerned.

The need is to educate people so that they can participate in management at an international level and this participation will require an adaptability to cope with the changing demands that economic and social developments will impose upon management and the profession.

If the present recession is regarded as temporary, ahead lies a renewed economic and technological expansion which will take the states of Western Europe further into the post-industrial society. It will not be enough to respond to those demands by supplying a narrowly vocational education which may satisfy the immediate needs but will leave the individual without an understanding of the broader framework within which he can identify his role.

Both management and shop floor must understand what increasing European integration is all about and to supply such information, close attention must be paid to recurrent or lifetime education, and to increasing the opportunities for students to take part of their courses at institutions outside their home countries.

It may be a gross generalisation to say that the European Community has the wrong image for young people in the 1970s but it is perhaps fair to say that the idealism of the immediate post-war period and the heady themes of federalism of that time do not seem particularly relevant to the contemporary politically aware young.

This is not to say that they are not internationally minded and that they have not, given the ease of travel today, considerable experience of the world and of Western Europe in particular.

Although the use of terms such as "the shrinking world" and the "global village" has been indiscriminate they can refer to a sense in which the pre-war concepts of nation and nationality have become blurred.

And while the mobility of young people in terms of travel has increased it has not been matched by any increase in student mobility in education within Europe. Indeed there is some evidence that the proportion of Europeans who study in a European country other than their own declined during the 1960s.

Certainly some structural barriers to mobility have been lowered since the war and the pioneering work carried out with regard to the mutual recognition of school leaving certificates was undertaken by the Council of Europe during the 1950s.

This work led to a Convention signed by most member countries which recognizes the equivalence of a school leaving certificate in a member country for the purposes of university matriculation in other members. But the acceptance of this Convention has not led to any dramatic changes in student mobility and the majority of European students who choose to study for a full degree in another country do so because the course they want is not available at home.

This may be because the country is too poor or underdeveloped to provide a full range of university courses, particularly in advanced science and technology; or because the country, although advanced, is too small to provide viable programmes in certain specialized fields.

The British student who wants to study abroad for a first degree will find difficulties which may be insurmountable. The first is to find information about the courses offered at continental universities and here he will find his own university or local library rather unhelpful in the provision of catalogues and prospectuses.

He is on his own and must prepare himself for visits to the office of the appropriate cultural attaché and for paperwork which in comparison will put the UCCA operation firmly into perspective. If he finds the right course and has brushed up his language, he will still need rich parents because the local authority will not finance him.

The student stopped by that but attracted still by the prospect of study abroad compromises and sends off his application to Cheltenham. A four-year programme with three years in the United Kingdom and a fourth year abroad seems a possibility, but unless he joins a language department with a regular and compulsory scheme of study abroad he will be thwarted again.

Few students at university, other than the language students, have the opportunity to intercalate a year or a term abroad and even if the department can be flexible, and smooth the path for the student through the administrative maze, the question of finance may be the final barrier.

There have been recent developments aiding student mobility within the United Kingdom and students transferring from one university to another may claim exemptions based upon their work at the first institution.

Is it not time to take major action to facilitate student mobility within Europe and to provide both students and teachers with the expanded opportunities of drawing on attitudes and experience across national boundaries?

This will require continuing willingness in this country to integrate foreign students into the regular programme of courses and also a commitment to provide a sophisticated advisory service for British students wishing to study on the Continent.

Furthermore, let us not be too narrow in our definition of a student: at a time when the pressure for the development of opportunities in continuing education or education permanente is axiomatic, there is enormous scope for the development of courses providing insights into the shared European cultural heritage and such courses could supplement interchange schemes.

Such programmes taken together may be able to provide the framework of learning and experience which could produce managers, technologists, teachers and even politicians who have an appreciation of other cultures gained first-hand. Thus enriched they may be prepared to commit themselves to using their experience to maximize the values of this cultural diversity within the institutions found on the Kirchberg and elsewhere.

Terence Bishop

The author is registrar of the School of Oriental and African Studies, University of London.

A Canadian study shows that limited size has its own handicaps—Simon Midgley reports

Small universities pushed aside

Small Canadian universities are at a serious disadvantage when it comes to competing with larger institutions for research funds:—and there is a pressing need to redress the balance. This is one of the main findings of a study group convened by The Canada Council to investigate the needs of scholars at small universities.

In a recently published report the Council identified 21 small universities where scholars had had below average success in obtaining research grants and in participating in the council's own Leave Fellowship programme.

It found that 44 per cent of all the money it distributed for social sciences went to the larger universities with more than 10,000 students whereas only 11.2 per cent went to institutions with less than 5,000 students.

And while an average of 431.87 dollars was spent per student on research in the larger universities (with more than 10,000 students), the figure dropped to 192.18 dollars for universities with less than 5,000 students and to 18.80 dollars for those with less than 1,000 students.

The Council convened a study group to study the special needs of the scholar at a small Canadian university after becoming increasingly aware over the past five years that some universities were less able to take advantage of the Council's research and leave fellowship programmes of grant aid than others.

Defining small universities as those which in the 1975-76 academic year had fewer than 3,500 students, they also included in their survey those universities in which there were scholars whose research needs were similar to those of small universities—new institutions, isolated institutions, and even in some cases small departments in relatively large universities.

Even before convening the consultative group the council suspected that small universities shared a certain cluster of problems. At that early stage it hypothesized that the problems would include: the absence of a research tradition because the institutions were often young universities; high teaching loads because of the large number of undergraduate courses offered; and the absence of graduate studies which resulted in a shortage of research assistants and a lack of academic challenge.

Other problems they suspected included: a lack of internal funds for faculty research; inadequate secretarial assistance; a general absence of research facilities including library and archival resources; limited scholarly access to others working in the same field; and the fact that the institutions were often situated in relatively isolated communities.

After detailed study the group discovered that many of the problems of the small and often relatively new universities were associated with the way in which they had developed historically.

"The demand for university expansion in the 1960s was so great that a policy of selective growth with a specific research orientation could not be achieved.

"Staff were hired without regard to research interest", the report says, "and libraries were under pressure from a large new staff to expand holdings in a great many fields. The consequence was a lack of research focus in both library resources and in personnel".

"Furthermore, hiring pressures during this period caused the small universities, normally with relatively low budgets, to employ many staff who had not yet completed their PhD.

"These young staff members immediately assumed heavy teaching responsibilities in terms of both numbers of students and variety of courses. Consequently, they often required up to 10 years to complete their final degree, during which period their list of publications often remained noticeably short.

"In competition with older researchers and others with many more publications to their credit, these young and relatively inexperienced and unproven professors were bound to fare rather poorly in competitive grant programmes."

The expansion of the 1960s and 1970s also had an effect on the more senior personnel at small universities. They tended to get involved in administrative work and to drift away from research.

For those small universities that existed before the days of expansion emphasis was often placed on pedagogic education rather than on the discovery of new knowledge. Senior professors at such institutions tended to belong to the teaching—orientated tradition rather than the research tradition.

Summarizing the key hindrances to research in small universities the group singled out: the absence of academic recognition by their peers because of relative immobility and isolation; the need for administrative recycling; the paucity of local research resources; the absence of research policies or priorities; the lack of graduate assistants or a favourable research climate; and a shortage of time because of the emphasis on teaching activities.

"Basically, scholars at small institutions are separated by a distance, both geographic and academic, from the active centres of research. They experience great difficulty in maintaining the participation and open communication necessary for truly advanced research", the group reported.

"This isolation combines with the general youthfulness of faculty at small universities to produce a situation in which opportunities are missed, skills go undeveloped, and interest flags."

The group identified the importance of increased contact and access as the key need for the individual scholar at a small university. To remedy these deficiencies the group suggested three new research grant programmes.

One recommendation was that a research visits programme should be introduced to enable scholars to visit other universities where there might be greater opportunities to carry out their research.

The second was that research workshops should be arranged to stimulate and advance research by focusing on research methodologies and to introduce the "nascent" researcher, primarily at small universities, to the methods, techniques and main problems associated with this particular proposed area of study.

The group's final suggestion was that all universities should be given a supplementary grant specifically earmarked for bringing research consultants to isolated or disadvantaged centres.

Although the group's recommendations have not yet been implemented The Canada Council has examined its "thoughtful" suggestions and have promised to give them careful consideration when further funds become available.

Needs of Scholars at Small Universities by the Consultative Group on the Needs of Scholars at Small Universities is available from The Canada Council, PO Box 1047, Ottawa, Ontario, K1P 5V8 at $2.50.

Welcome for TEC art committee

The establishment of a committee for art and design by the Technician Education Council has been welcomed by an inter-regional standing conference.

But "moral support" is tempered by a warning of confusion if the committee was to ignore the past and a plea to note the regions.

Responsibility for the validation of vocational courses in art and design was passed to the TEC in February 1977 and progress began towards the establishment of the committee for art and design.

Now, the inter-regional standing conference for art and design which first met on February 2 has produced a report on vocational courses in art and design.

The report calls for a well-coordinated approach which takes into account all shades of opinion and bridges the gap between the degree and non-degree sectors.

The conference has two representatives from each of the 10 regions in England and Wales and co-opted members representing other interests. An observer from the Society of Industrial Artists and Designers has attended each meeting.

The report is enthusiastic about the committee which it says will enjoy considerable moral support because of a widespread feeling among colleges and departments that a national and nationally recognized structure is long overdue.

At the same time, it warns that the committee must take into account realities of a finely balanced structure which has developed organically over a long period. The conference is determined to avoid the confusion which could result if the committee ignores the past.

By bringing together the views of 10 regions of England and Wales the conference has tried to identify common ground between the various schemes which exist for art and design courses. Existing regional differences, it believes, should remain within the new national system.

The report recognizes that the TEC committee provides an opportunity for colleges to plan their individual programmes but it says that the regions strongly believe that use should be made of experience in Regional Advisory Council and Regional Examining Body art and design advisory committee panels throughout the country.

It says: "These committees, which include representatives of industry, commerce, professional bodies, local education authorities and the colleges themselves, have established an insight into the character and needs of their respective geographical areas which a centralised administration cannot hope to achieve."

Because of tight financial constraints, TEC arrangements for art and design must take advantage of existing machinery.

The need to take note of the regions echoes throughout the report. Can all assessment be based in London, the report asks. It doubts whether it can, though it accepts the need for centralized administrative arrangements.

"Extensive use of in-course assessment methods for art and design courses will itself generate the need for a common approach in those regions where this does not already exist."

The report makes three recommendations which spring from the emphasis the conference places on regional involvement.

The first is that the role of existing regional groups should form a continuing and positive part of the new national structure.

The second is that the committee for art and design should consider guidelines to ensure that immediate attention is given to the implementation of TEC policy on curriculum development, in-service training, the promotion of cooperation between colleges and the coordination of regional views.

The third is that, because of TEC's willingness to accept whatever assessment methods and techniques are most appropriate to a particular programme, an immediate investigation should be carried out to establish the best form of moderation and assessment procedure for vocational courses in art and design.

Judith Judd



Rational structure needed for art and design courses

TV or not TV? that's the question

The Open University is scrutinised here. Top—Tim Robinson on broadcasting and, below, Beverley Shaw on staffing

BROADCASTING AND HIGHER EDUCATION



cation aimed for the Open University. Equally it could prove to be its epitaph. The twin pillars around which the OU is built—access to degree courses by informally qualified students, and flexibility in and between traditional subject areas—threaten to become the horns of a dilemma from which the university will not escape.

There is already a danger that the OU is declining into what its harsher critics claim it to be: a marketing organization of academic "admass" clothed in the seductive technology of broadcasting.

A misunderstanding seems to have crept into OU thinking confusing the literal packaging of material for dispatch to students with the idea that the stuff of academic inquiry comes in packages, the principal problem being how to unwrap it for consumption.

In many respects the root of the problem lies in the idealism on which the OU was founded. In the early days it must have crossed someone's mind that to attract the kind of students for whom the university had been started certain highly novel tactics would have to be employed. These ploys—at least akin to marketing—related to both distance teaching and broadcasting.

The use of television broadcasting in particular is crucial because so much of its grammar belongs with stage production, while its rhetoric is firmly fixed in entertainment: movement, colour, excitement, spectacle. Of course television is a powerful piece of educational technology but there is an inherent danger in its use in education—especially when its products are broadcast. The latent pressure is that the play's the thing: performance and style continually operating to undermine and subvert content.

With the OU this pressure is constant because the television programmes are produced by BBC professionals whose norms tend to over-ride academic requirements. The awe-inspiring technology is probably a key factor in persuading reluctant academics to toe the media professionals line.

And indeed we have plenty of evidence to how this is the case. Recently we have read about the play the BBC refused to transmit, effectively resorting to the terms of its Charter to back up the censorship of a fairly mild scene of sexual embrace. Then there was the case where a senior producer insisted statements by an ex-criminal on a "People and Work" course programme were edited out because they went against the official BBC line that British criminals do not use guns. And, most ludicrous of all, a scene showing embalming being done was cut because it might upset viewers.

Possibly, had these programmes been made with less professional television goals and more strictly educational ones in mind, the BBC would have felt a "stray" viewer tuning in could recognize they were palpably not BBC programmes in origination or intention. Probably not because the real issue is that these programmes are for *broadcasting*.

My suggestion is, then, that in the formation of the Open University, marketing the product—knowledge—has taken too high a priority and that as a consequence television norms and practices have swamped educational purpose. And, I would argue, this swamping applies not just to the television output. The main written output of the Open University, the course units, reflect more and more, what might be characterized as rules of presentation rather than rules of content.

One result is that supplementary material is badly produced. More importantly the mass media emphasis ignores the Open University's teaching staff and the value it has. But all this is to consider only one side of the Open University's concern about how to find and keep students. This concern, particularly about the need to interest those adult students who have genuinely missed educational opportunity, is perfectly legitimate. Nevertheless there are many options open to an institution like it in getting and keeping students. The Open University all-stars entertainment show is probably the least attractive educationally.

The second fundamental concept with which the university began—subject flexibility—has also fallen foul of the same marketing and preservational techniques. It has, I submit, led to many students believing that all subjects can and ought to be radically broken down into which all may eclectically dip to emerge dripping and triumphant, sufficiently soaked to obtain that magic BA.

It is a seductive picture of what constitutes learning—or why knowledge has become so subdivided. There is an implication that with the correct presentation all distinctions fade and a jolly time may be had joining up all the previously artificially divided bits. Well, yes, if we are discussing the elementary and false syllogism that because discovery consists of people making sense of their world, therefore all discovery is comprehensible to anyone.

The falsity of this position is compounded in teaching adults by the ease with which their often valid experiences can fall like a dead weight, reinforcing their belief that what is presented to them constitutes nothing more than jargonized common sense. And adults, because they have learnt to live in and through a concatenation of coping strategies, evolve faster than their youthful contemporaries how to minimize effort to survive a course, to get an appropriate grade.

All students play this sort of game. But in the Open University there is, so it seems to me, a tendency to do it more consciously. This instrumentalism is given added force by the distance which separates student and teacher; teacher and Walton Hall campus.

Distance prevents understanding. It stops dead the possibility that teachers can help students explore those legitimate connexions which exist between all branches of knowledge: distance twists those connexions like a twig in a dowser's hands, turning the meaning of discovery into a party trick.

In the Open University this deadening distance exists at all levels: between course teams and part-time staff; between part-time staff and students; between student and student. The efforts of the centre are over-directed at trying to get coordination and coherence between the staff in order that they may present a single front to the world and their students.

Naturally students recognize what is happening. The alienation it causes emerges in a conscious, sometimes fiercely defiant manipulation of staff and the system, to provide a reified support. There is a neuroticism about grades; their meaning, about the way co... teams think, above all about ... questions will come up in ... exams. It distills to the old, ... game the worst teachers play: ... what answer is in my head. ... I am sure that is not the ...

There is no reason why the ... has to operate this way. From ... start it has tried, bravely, ... up to the most intractable ... lems: distance teaching is only ... —perhaps *the* only one ... remains incurably unresolved.

Inevitably I have my own ... about what ought to be done. ... what they are worth I present ... here, not in the hope they will ... implemented, more for the sake ... starting a long overdue ... debate about the next steps ... should take.

First the broadcasts. Televi... broadcasting should be ... altogether and replaced by ... cheaper CCTV organized thro... the study centres. With the gro... of video-cassettes the way in ... television may be turned will ... naturally; indeed the OU may ... add the reduction in price of ... cassettes and VTRs over the ... decade or so.

I consider the greatest pos... ties lie with radio. But only if ... national network is abandoned ... the OU uses BBC local ... BBC local radio now covers ... major part of the country and ... expansion envisaged when ... Annan Report's recommendations ... are accepted means about nine... 20 stations will open shortly.

With local radio there is a ... more chance of students and ... rime staff being used to make ... grammes and to engage in dis... sions—perhaps in the most re... tionary model by getting ... run phone-ins for their stude... Non-OU students could be excl... by simply getting those ringing ... to give their student num... before they are accepted.

I want to see the OU devol... to eventually reorganize so ... more emphasis is put on ... periphery rather than on ... centre. Ten years is a long ... for a body as revolutionary as ... OU to do nothing about tackling ... biggest problems and with the ... ing debate about the use of bro... casting for the rest of this centu... now is a sensible time to reas... its use.

There is one other point, thou... Although there are many peo... who would consider this reaction... I believe the OU must ... on its students taking not ... than one and a half credits a ye... —giving a non-exempt student ... pass degree in four years. It ... farcical to try and maintain st... dards where students with s... intellectual capacities can pos... along for a decade, finally amass... enough credits to scrape a ... degree. As well as breadth ... depth a degree course must ... speed of absorption of knowled...

By making these changes—wh... financially would mean altering ... balance of payments towards p... time staff and study centres, ... away from the immensely cost... television productions—I see t... OU moving decisively into a secon... phase of life where, at last, ... right connexions can be made.

The author teaches journalism at the London College of Printing and is a tutor on the Open University mass communications course.

No debarment on personal, political, or religious grounds

It was reported in the December issue of *Sesame*, the magazine published by the Open University for its staff and students, that the OU Branch of the Association of University Teachers had passed a resolution by a 2 to 1 majority, part of which read: "University teachers . . . should not be prohibited from entering into a teaching or research-ing post, or debarred from continuing in one, solely on the grounds of personal philosophy, political or religious belief."

This view is defended by an argument—also a part of the resolution—that "a healthily university system requires that its teaching and research reflect a plurality of intellectual positions and approaches." This could be further supported by reference to arguments with which readers of J. S. Mill's essay *On Liberty* will be familiar: that we ought not to suppress or censor the expression of heretical or unorthodox opinion for the reasons that such views may—given the fallibility of human knowledge—be wholly or partly true, and if false their refutation will sharpen our perception and understanding of the truth.

Nevertheless it might be asked whether a university teacher's freedom to express his views, however unorthodox, should be less than or much the same as that of the non-academic citizen. This question will, of course, be pressed most closely in those areas of study where a teacher's personal views and his professional teaching overlap. This is obviously possible in the teaching of religion, politics and the social sciences generally; but perhaps even teachers of the natural sciences may find on occasion that their religious or political beliefs touch upon their teaching.

The university teacher's freedom to teach heretical and dissident views may be challenged on the grounds that his relationship with his students is of a different kind to the relationship of one citizen to another. The teacher has some degree of authority over his student: he is supposed to know more—to be, that is, an authority in a field of study to which the student comes to learn.

In the context of the university as an institution the university teacher has further authority—particularly that which arises from his role as assessor of the student's learning, and in the certification of such learning. Thus, however lightly carried, the university teacher is in a formidable position of authority over his students.

It is for this reason that universities demand convincing evidence of learning and scholarship on the part of their teachers. Such a statement may provoke a hollow laugh in many quarters and it has to be admitted that some areas of study are in themselves so relatively new or controversial that there may well be little agreement on criteria for appointment.

However, teachers on the whole will be chosen whose outlook and knowledge in the context of their discipline or "subject" is consistent with the prevailing state of knowledge in their discipline. For example, it is unlikely that a physicist whose understanding of the physical world is pre-Copernican rather than post will be appointed a university lecturer. In such a way will many holding unorthodox or unfashionable views be prohibited from university teaching.

The resolution, however, refers to "personal philosophy, political and religious belief". These are not to be the sole grounds for prohibition or disbarment. The phrasing of the resolution does, incidentally, suggest that such might be appropriate grounds if they are combined with others.

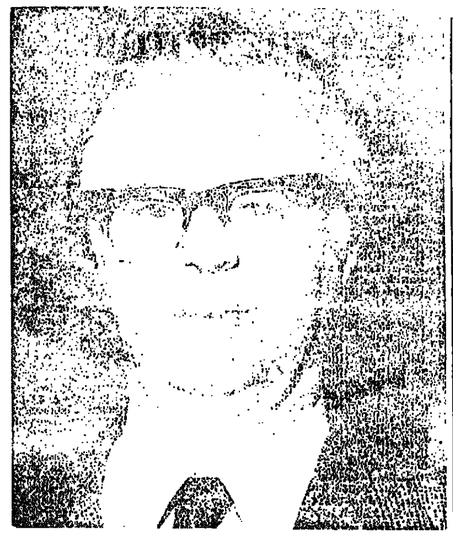
And this is the rub: for there are difficulties about which we are all aware in clearly separating our "personal philosophy" from our scientific and professional beliefs. I say "difficulties" because such difficulties may be overcome. But this is unlikely to be a feature of those whose outlook denies even the possibility of distinguishing between subject and object, and between opinion and knowledge.

And there are indeed persons whose political and religious beliefs are of a kind which do not allow for the view that human knowledge can be seen as a variety of discourses to a greater or lesser degree autonomous. Such people make up a group—very miscellaneous as to origin and characteristics—which deny even the possibility of objective knowledge, disinterested scholarship, and the distinguishing of rational inquiry of both human affairs and natural phenomena from moral and political beliefs and action.

Are, then, the "personal philosophy, political and religious beliefs" of such persons not a legitimate object of inquiry and concern when it comes to their appointment to the staff of a university?

To put the point I am making *ad hominem*: Would the faculty of social science of the Open University appoint as a lecturer a member of the National Front well known for his racist views? I think not. And it is the belief—right or wrong—that at least some of the people who profess "Marxist views" belong also to this group that has led to the recent consideration of the limits as well as the scope of academic freedom.

The author is a lecturer at the Durham University school of education.



Mr Millan's change of heart over Scottish colleges may only be delaying the evil day.

Escape from frying pan may bring little relief

Mr Bruce Millan, the Secretary of State for Scotland, may think he has every reason for feeling pleased with himself. In fact he has managed to escape from a rather messy frying pan into a fire which will prove extremely hot. Tertiary education in Scotland is in a state of chaos and the recent reprieve of the three colleges of education threatened with closure or merger underlines the continuing ineptitude of the Scottish Education Department to make up its mind about the future structure of post secondary education.

When last January the Government drew up its ill-conceived and hastily prepared document on the future of teacher training in Scotland, it failed to realize that what it would create in the face of political pressure from all sides and a brilliant campaign by the colleges, Mr Millan has now climbed down and the SED is left once again with egg all over its face.

The secretary of state's decision to retain all 10 colleges of education is, by his own admission, a reluctant one since he is still claiming that his original proposals were the best solution. However, he had come under considerable criticism for a scheme, which to say the least, was downright misguided: therefore some change of plan was inevitable.

Mr Millan's petulant volte-face is bound to increase the growing clamour for a public enquiry into higher education in Scotland. Already Lord James Douglas-Hamilton, MP, has called for this, and other politicians, both local and national, are likely to follow suit. Confronted with a rapidly diminishing school population it now seems likely that some of the Central Institutions and the Colleges of Education will merge.

Exactly how long it will take is a matter of speculation but the new proposals will lead to a change in the status and function of the existing colleges. Diversification has been thrust upon them at last and those college principals whose chauvinism regarding Scottish education was hitherto perfectly intact will now have to come to terms with a new situation.

It is worth looking at Mr Millan's plans in detail since the implications of them will be far-reaching. Redundancies are bound to occur but to whom and when is another question. The present euphoria at a stay-of-execution is understandable but the future remains uncertain for many lecturers. Under the present proposals, the reduction in teacher training will be achieved by the permanent reduction in accommodation but the fact that unused space at the colleges is to be handed over to other educational institutions marks a radical change.

Callendar Park College, which was fortunate to have Mr Harry Ewing, MP, championing its cause, will now house the accommodate trainee nurses from the Forth Valley Health Board. Craigie College in Ayr will be providing places for 200 students from the local technical college and in Edinburgh, Queen Margaret College, a central institution, will be linked with the Dunfermline College of Physical Education. If there is a continued surplus of places there, it is possible that the Lothian Health Board will be interested in using the premises.

The decision to retain Dunfermline College leaves Mr Millan with a headache. His original intention was to merge it with Dundee College of Education which has a capacity for 1,800 and at present boasts 579 students. In fact a reappraisal of the provision of non-university higher education in Dundee is now bound to take place in view of the duplication of facilities in that city.

Aberdeen College of Education, which has 1,000 empty places, is likely to find its surplus accommodation being used by Robert Gordon's Institute of Technology and discussions have already started between the two institutions.

At this stage it is not proposed to formally merge central institutions with the colleges of education and Mr Millan's "face-saving but ineffective policy", to quote the words of Mrs Margaret Bain, MP, a former teacher who now speaks for the SNP on education, is an accurate description of the solution. Where the January proposals were ill-considered, the new policy can be seen only as a stop-gap.

An examination of the organization of further and higher education in Scotland has now become a priority. The issue can no longer be ducked. The fact that Scottish education is to a large extent already devolved in no way detracts from the urgency of the question. English educationalists may wish to query why the declination of colleges of education has not been reciprocated in Scotland. The answer is simple, Mr Millan has caved in for political reasons and it is a tribute to the Nationalists that they can exert this sort of influence on a Labour Secretary of State.

It is just possible that the SED has some long-term strategy to impose a harsher form of rationalization on the colleges of higher education in Scotland. For the moment it is keeping quiet about it and in the meantime Mr Millan has merely put off the evil day.

Henry Cowper

The author is senior counsellor at the Open University in Scotland.

Wanted: a better preparation for going into manufacturing

Richard Lowndes argues that polytechnic first degrees fail to meet shop-floor demands

In the United Kingdom we have allocated costly resources to the polytechnics to meet the needs of wealth-producing industry for appropriately trained and educated personnel. Nevertheless, a failure to provide the necessary type of technologist persists.

Educational frameworks exist to cope with this need, through sub-graduate programmes, first degrees and post-graduate programmes. A body of learning in the form of knowledge and skills exists, which can encompass within a first degree programme the technology of what actually happens on the shop floor.

A key concept, which is intellectually stimulating and derives from up-to-date studies of the real world of industry, has been developed in the United Kingdom in the form of "socio-technical systems analysis". It provides for understanding the relationships between technologies of production, organization structures and work behaviour. There is no shortage of literature and learning material, all with a view to gaining insights into what happens on the shop floor.

We can identify a common core of learning to illuminate many technologies, and identify specialist studies to focus upon particular technologies. We can ensure relevance of subject matter and activity-based learning methods which involve the student in the work place. There is no shortage of engineering-based teaching expertise in the polytechnics and there is every opportunity to develop the exciting area of the interdependence of such knowledge with the understanding of human behaviour at work.

Despite all this we are failing to train and educate people at first degree level in a way which equips them directly to contribute to the wealth-producing processes of making things, which currently goes under the label of "manufacturing technology". It is not fanciful to suggest that the assembly line of mass production symbolizes the antipathy of the young to working in manufacturing industry. Thankfully, when British industry presses for graduate technologists to join it, it is not exclusively asking the young to put their lives on the line.

We produce goods through technologies which are continuously developing and changing, and study of the interaction between people and machines is all the more interesting as a result. Further, we are misguided to separate study of the total technology—simplistically defined as the interaction of men, money and machines—of producing goods from that of providing services. We will be following the wrong track if we respond to current pressures by only offering revamped programmes in production engineering, cosmetically amended to suggest a new look to suit the manufacturing technology of large mass production companies.

Instead, we will do better to tackle the whole sphere of technology and management in first degree programmes in which mass production is but one stream, existing along with compatible approaches for jobbing and batch manufacture, as well as, say, environmental technologies such as construction and surveying, and service industries such as warehousing, transportation, and computer services.

Programmes can draw upon the particular mix of expertise in individual polytechnics and relate to the industrial needs of the communities in which they exist. Further, by an approach based on the provision of specialist studies and common core studies we can avoid the wasteful use of costly resources which results from the proliferation of separate programmes each existing in isolation from the others.

Although the point of concern today is that of manufacturing industry's needs, there is a remarkable lack of clarity and confidence in defining what those needs are, in terms of the role which the student is to fill on graduation. There is a sharp contrast between that hardness and the precise definitions which people can provide in the wealth-producing service industries. In land surveying, for example, the different roles relating to different education programmes can be clearly articulated. The technician from the Ordinance Survey embarks on a higher national certificate programme and emerges equipped to fulfil a role in operations management in the field.

The higher national diploma is customarily undertaken by a person working in the commercial sector of industry (such as an aero-survey company); he acquires the expertise to undertake not only operations management but also the commercial responsibilities of obtaining business from clients, calculating costs, quoting terms and producing profits. The bachelor of science student passes through the Joint Survey Scheme organization to embark on a professional management career in the Ordinance Survey, the Ministry of Defence or the Ministry of Overseas Development. He will not only be equipped to run a survey department in the field, but also to tackle resource management of estimating, budgeting, staffing and to specialize in a technological back-up service such as computer applications.

In the case of engineering it is very difficult to uncover a clear articulation of the employment roles a student will be required to fill and so to frame the process which can best equip him or her for those roles.

It is small wonder that the educators in polytechnics refuse into defining course objectives in terms of skills in written communication, record keeping, preparing and interpreting engineering drawings using conceptual models. As to the position of the employer, the needs of the large engineering-based corporations, committed to manufacture by mass production, can be more clearly defined. "Manufacturing engineering" is distinguished from "plant engineering" and as such involves the knowledge and skills of layout, materials handling, machine processes and quality control.

Equipped with that expertise, integrated with an understanding of management in terms of the "men, machines and money" mix, the graduate who joins such large organizations will take up a role in a service department such as industrial engineering. The assumption is made that he or she will not be prepared to take a job at the lower levels of mainstream management, through an antipathy to shift working and the general grottiness of the shop floor.

It is essential that polytechnics should provide programmes to meet the needs of those large corporations, but it would clearly be a mistake to do so to the exclusion of meeting the needs of the total spectrum of wealth producing industry, where small and medium sized companies vastly predominate in number over large corporations.

The crucial information which is missing is knowledge of what those organizations really need when they call for graduates to contribute to their activities. Before the expansion of further and higher education, the rank and file labour force contained a much larger potential of people available for advancement through the various levels of management. Now such people are diverted from the factories into extended education. Further, the incentives of money and status for the shop floor worker to join management are not now as strong as they were five or ten years ago.

Currently in the United States major activity is occurring in such new park technological universities as Purdue, Indiana, to meet the needs of wealth-producing industry by first degree programmes in specialist technologies, combined with management knowledge and skills. Such programmes use course networks comprising common core and specialist studies, backed up by design of individual study plans, and are geared to equipping the student to enter the lower levels of line management with an understanding of what happens on the shop floor.

We would do well to consider the virtues of an approach which provides for the acquisition through a first degree programme of expertise in technology and management, in preparation for a role in the lower levels of line management. It is not possible to reconcile within one programme high academic rigour in a specialist technology with practical skills of use on the shop floor; the needs of large mass production corporations with the needs of small and medium size companies; and the immediate employment prospects for the individual with his or her long-term career aspirations.

It is possible to meet these needs if, instead of only providing discrete programmes, we make use of the course network approach.

British polytechnics have the opportunity to make a crucial contribution in this field. On the one hand we must overcome the roadblocks of narrowly based programmes, multiplication of provision, wasteful use of resources, lack of understanding of the needs of all the types of industry which surround us, obsessions with design and development and traditional concepts of production engineering. On the other hand we must make use of our strengths to meet the needs of students and employers.

The author is head of the department of manpower studies at the Anglian Regional Management Centre.



It is not possible to reconcile in one programme high academic rigour with practical skills.

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Real issues behind Gould affair

Professor Julius Gould started it all with his anti-Marxist tract *The Attack on Higher Education* so perhaps he must bear the greater responsibility for the consequent silliness which culminated just before Christmas with the poor Association of University Teachers being forced to face both ways at once. But wherever the dishonours must be equally shared between those whom Professor Griffith engagingly calls "the Goulden boys" and the radical chic establishment who have been jumping up and down crying "foul" and "McCarthyism" ever since Professor Gould gave them a dose of their own medicine.

Their attack on Professor Gould has concentrated on the manner in which he chose to put his message across rather than on the message itself. So far no one, inside or outside the Campaign for Academic Freedom and Democracy, has suggested that Professor Gould should not have been allowed to express his obviously sincerely-held views in public. He clearly believes there is great danger that universities and polytechnics in Britain may follow the path of many German universities to politicized perdition.

The TIMES disagrees with this view. We believe the danger is quite the opposite, that British higher education will lapse into conservative immobility. But we believe that Professor Gould was perfectly entitled to express his contrary view and that he should be defended against the innuendo that in some obscure way this was an illegitimate act.

However, the main criticism is that Professor Gould's pamphlet was unscholarly and that his decision to print lists of left-wing inclined academics had a sinister purpose. On the charge that *The Attack on Higher Education* was unscholarly two points should be made. First, one man's scholarship is another man's tendentious gobbledygook just as one man's terrorist is another man's freedom fighter. Secondly, the pamphlet is an old-fashioned, no-holds-barred polemic, in the rather high-minded and huffy criticisms from the Left about its "careless" assembly of sources in any case is not the criticism that these sources were all too carefully assembled?) or its use of "the paraphernalia of scholarship for political purposes" are really beside the point.

The Attack on Higher Education certainly is tendentious in its purpose, selective in its exposition, and often quite unfair in its interpretation. But why should it not be? It is after all published by an obviously right-wing body, the Institute for the Study of Conflict, not by the Oxford University Press.

On his decision to print lists of leftists Professor Gould is more vulnerable to criticism. His purpose clearly was to warn and possibly to intimidate whatever alternative interpretation he may suggest we believe. But just because the Professor Gould had disreputable motives does not mean that the effect is damaging to the individuals named. All the lists had been published elsewhere and surely those who appear on them are not ashamed of their commitment to the left?

Surely they are not like the man who had bought some books in a well-known Russian bookshop then near the British Museum just after the Russian invasion of Czechoslovakia and asked for them to be put in a plain brown-paper bag? (The shop assistant obliged by turning the bag inside out.)

However, the most depressing feature of the Left's over-reaction to Gould is that they are so ready to be distracted from the real tasks facing those on the Left in higher education. Like South Africa, Gould is an easy—a too easy—issue for the Left on which they can easily unite and about which they do not really need to think.

How much more difficult, and possibly divisive, to address the real questions, about widening access, about greater democracy within academic institutions (and not just for dons), about building bridges with the community, and even about the nature and forms of knowledge appropriate to a more diverse system of higher education and relevant to a more democratic, or even socialist, society.

The Gould controversy has precisely the same blinding effect on the more conservatively inclined in higher education. How easy to put down all the uncomfortable changes of the past 20 years to a conspiracy of leftists—and look, you can even read the names of the guilty men and women in the appendices.

But how naive to believe that the changing character of higher education is due to some sinister but superficial conspiracy rather than to the deep-seated social, economic, and political changes of the past generation.

Again, there are serious and difficult questions that must be asked and if possible answered: how can traditional standards of scholarship be preserved in a vastly expanded system of higher education in which a growing number of students have distinctly non-scholastic ambitions? How can traditional — and desirable — concepts of objectivity be protected in universities and colleges which will inevitably become more politicized — although hardly in the way imagined by Professor Gould?

On these fundamental questions, for tradition and reform alike, neither the Gould pamphlet nor the exaggerated reaction of those he attacks are much help. It is difficult to escape the conclusion that both "the Goulden boys" and the CAFD coterie need each other a great deal more than the rest of us need either of them.

Ford and 'British Brookings'

The proposal to establish an institute for policy studies, a "British Brookings", seems to be running into the sand. Last week in New York Mr McGeorge Bundy, the president of the Ford Foundation, said three conditions would have to be satisfied before the foundation would consider whether this idea should be backed with Ford money.

The first, that such an institute should enjoy stable and reliable sources of support from within Britain, has in a sense—a negative sense—already been answered. If such support was easily available, the help of the Ford Foundation would be redundant.

The second condition, that the plan should be encouraged both inside and outside Government, also seems to have slight chance of being met. The Government's own "think tank", the Central Policy Review Staff, is still distrusted in Whitehall in spite—or perhaps because of—the breath of new ideas it has brought to the stuffy bureaucratic corridors. What realistic hope can there be that an independent body based in the academic world would receive better treatment? Nor can it really be said that the idea of a "British Brookings" has attracted much interest in universities and polytechnics outside the ranks of the committee.

Meeting the third condition, that such an institute should enjoy "leadership of quality", probably depends, as does the commitment of any Ford money, on the satisfaction of the first two.

Yet the temptation just to give up must be resisted. The worst solution would be to set up some kind of "European Brookings" instead. The arguments against a "British Brookings" apply *a fortiori* to some new vacuous European body. Indeed it is because the entrenched interests, in government and universities alike, seem to want an institute of policy studies so little that such an institute is needed so much. Any attempt to cure the arthritis of ideas that so badly afflicts Britain, however strong the objections and however slight the apparent chance of success, must be supported.

LETTERS TO THE EDITOR

The McAuslan plan for AUT

Sir,—On first reading it, I thought Professor McAuslan's plan for the Association of University Teachers (*THES*, December 23) was one of those hoaxes that appear even in serious newspapers at this season. On second thoughts I just feel he is very naive. The Government does not listen particularly to FRSs, FBAs and other distinguished men and women, but to those with industrial muscle or influence. Since higher education is not seen by many as worth more than the proverbial "row of beans", the AUT has neither.

Further, if top people are not already interested in the AUT, their being invited in to run it means that either its policy will be changed in the way the current membership will not like, or they will lose interest and leave again. It would certainly make a nonsense of any notion of democracy if this were to take place. In general, elected leaders are those who have a record of service in members' interests over years. The despairing search for a different leader is really a substitute for a realistic policy.

Might not the AUT consider abandoning its ill-considered policy of trying to prove its members are so much worse off than others in higher education and join with the rest of us in putting forward a common policy and claims for identical pay scales? Divisions can only play into the hands of those who have little interest in public education. Unity makes a much better motto for trade unions than "follow the heavyweights of the profession".

Yours faithfully,
C. A. HORN,
National Association of Teachers in Further and Higher Education, Oxford Polytechnic.

Sir,—An academic lightweight, may I commend to academic heavyweight Professor McAuslan a few words from Tillotson: "We ought to be glad, when those that are fit for government, and called to it, are willing to take the burden of it upon them; yea, and to be very thankful to them too, that they will be at the pains, and can have the patience, to govern and live publicly. Therefore it is happy for the world that there are some who are born and bred up to it; and that custom hath made it easy, or at least tolerable to them."

Yours faithfully,
JOHN GILLARD WATSON,
Hon Secretary, Oxford Association of University Teachers.

S. African academic freedom

Sir,—Your article "Campus books ban under fire" (*THES*, December 16) gave a reasonable account of some work of our committee. However it was very wide of the mark in referring to our university's negotiations with the Directorate of Publications as "approaching confrontation" and a "potential show of strength". This was neither stated nor implied to your correspondent.

The laws which cover banning of books in South Africa are diverse and complex. University libraries have nonetheless received permission to retain large holdings of banned books, for study and research purposes. The directorate has recently reviewed its powers and called on universities to send it detailed reasons for retention of certain banned works. In reacting this university provided a sober and reasoned analysis of the scholar's difficulties and the library's position. We sincerely hope that the directorate will accept these submissions.

Your correspondent's remark that academic freedom is a "trite phrase" in South Africa is unfounded. Readers who wish to understand the present state of university autonomy in South Africa will be better served by reading the 49-page review *The open universities in South Africa and academic freedom 1959-1974* (Juta and Co Ltd, 1974).

By far the most important objective of our committee is to implement the promise we made in 1961, recorded on the campus on a prominent plaque, to uphold the principle that a university is a place where men and women, without regard to race and colour, are welcome to join in the acquisition and advancement of knowledge; and to continue faithfully to defend this ideal against all those who have sought by legislative enactment to curtail the autonomy of the university, which ends: "Now therefore we dedicate ourselves to the maintenance of this ideal and to the restoration of the autonomy of our university".

Although the Government established the policy of racially segregated universities there are signs that it recognizes the need for major educational reforms in South Africa; restoration of our right to select our students on a non-racial basis would be widely interpreted as a constructive act. In fact, in 1977 this university was permitted to register 644 students who were not white, out of a total of 11,341.

Academic freedom is shallow and tenuous without academic responsibility. Perhaps academic freedom here is more evident today than it was 10 years ago in the context of the freedom charter: words translated into deeds; scholars in every sector of South African university life are more actively and publicly sharing in this responsibility. This university's share is reflected in a sharper awareness of its role. During the past 50 years we and our predecessors tried to build a university of the first rank.

But our Transvaal setting has another component — a slower-moving and numerically exploding Third World, bent not only by discrimination, but also by the burdens of illiteracy, malnutrition, high fertility and the exodus from rural areas to the towns. As a university, our destiny lies in our response to this complex and polarized setting.

In our research in nutrition and obstetrics and water resources, in our training of community leaders for welfare projects, and in many other similar activities, your correspondent could have discerned a far-from-trite meaning to academic freedom. We do as much as we can—and actually move to the limits of the law's constraints—in making the university's facilities and skills available to all sections of the community.

Yours sincerely,
L. O. NICOLAYSEN,
Chairman,
Senate academic freedom committee, University of the Witwatersrand, Johannesburg.

Commitment to social work

Sir,—Your report on polytechnic students attracted to sociology because it provides the opportunity for a liberal education relating to "community and world problems" (*THES*, December 16) will be seized upon by those myopic administrators anxious to substantiate their hitherto firmly held conviction that any student not proposing to offer himself for service in industry and commerce has no place in a polytechnic.

Fortunately, the study proves very little though this is unlikely to deter some of your readers. Attitudes at the beginning of a course are obviously important but what is equally relevant is how the students feel at the end. In my own department at Newcastle which has a strong and thriving sociology degree with good vocational opportunities the interest in community and world problems carries over into a firm desire to enter social work and other caring professions, forms of personal social service which are expected to grow in the next decade.

Unfortunately, cutbacks in public expenditure have reduced the opportunities for training of the directly sponsored kind so that many of my ex-students slog it out by undertaking periods of unqualified social work as a means of making themselves more competitive for the training places that are available. Who will come forward and say that we do not need that kind of commitment?

Yours faithfully,
ALAN R. KING,
Department of sociology,
Newcastle Polytechnic.

Academic salaries

Sir,—Mr Simmons of the APT (*THES*, December 16) accuses university teachers of dishonesty over their pay comparisons with polytechnic teachers. The factual and logical errors in his letter provide no confidence that Mr Simmons is not devoid of the same sin himself.

The 16-point polytechnic LII/SL scale (£3,744-£6,909) starts higher and ends higher than the 17-point university scale (£3,333-£6,655). Without casting doubt on Mr Simmons's arithmetic ability, any schoolboy could say the clear implication is that university teachers must be paid less at each scale point. By quoting false figures for the length of the university scale (17 points not 14), and by very carefully avoiding any reference to the fact that the polytechnic LII/SL scales overlap by two points, thus reducing the scale to 14 points for any polytechnic lecturer with degree teaching pretensions, Mr Simmons corrupts this to his advantage.

In reality, when a university teacher reaches his 14th point at £6,020, the polytechnic teacher is at his maximum of £6,909. Thus, there is a difference of some £400 at the base, increasing to some £900 at the top; much in excess of the £250 that Mr Simmons even denies.

Mr Simmons also thinks that fallen back from their previous priority in the order of industrial earnings. Nor are such demonstrations of relative discontent by any means a merely British phenomenon.

One could, indeed, argue that it is not so much the problem of general pay restraint (in face of monetary and internal trade union pressures) as that of pay differences, which represents the rock on which successive attempts at national income and prices policy have ultimately foundered. Two such previous endeavours which had general union support in Britain, those of the first post-war Labour Government and the Wilson Government of the late 1960s, both ended in wage explosions in which a large pressure was the accumulation of sensed "anomalies" which such policies were thought to have induced; and the present Labour Government's Social Contract seems in some danger of a similar termination. Our Liberal Party has just declared that Britain is ungovernable without a pay policy. But a central contradiction of pay policy experience has been that general restraint is inevitably uneven in its impact, and leads to an accumulation of sometimes intensely felt inequities, the assuagement of which would be incompatible with the continuation of average restraint.

It is not only, however, the development of governmental income policies which has projected pay differences into the social arena's centre. Two other pressures have contributed to this effect. Those who have participated in or observed wage and salary negotiations over any long period will recall that throughout the years after the Second World War into as late as the mid-1960s, a reference back to a relativity ruling in 1938 was a common argument in pay claims.

The wartime inflation itself had often substantially disturbed such traditional or pro-established guidemarks for pay differences, and set up inflows (and commuting ones) from groups who had gained comparatively during it. The acceleration to sharp and unstable inflation during the 1970s virtually swept them away. Since in that context, to fall behind relatively was often to experience also an absolute fall in living standards, the test of sectional wage pressure's ability to prevent such a fall became that of whether one's group could keep up with others in the pay scramble. The determination of pay differences thus became critical to the maintenance of sectional living standards. And this was still more true when the "affluent society", with its persisting average growth of real income, gave way, in the mid-1970s, to average decline in the latter. Struggles to maintain pay relativities became, in effect, struggles against comparative poverty.

The other pressure was egalitarian. On the one hand, the postwar growth of material expectations, of communication and information, of comparative knowledge, combined with the apparent success of union and political pressure in raising the condition of low-paid and low-income groups, to induce a general questioning of attitudes, substantial or merely inherited inequalities.

On the other hand, the apparent decline of property ownership from its former position as the main source of income inequality (plus, perhaps, a certain disillusionment with socialization or nationalization as a universal and sufficient specific for major socio-economic ills and inequities?) somewhat shifted reformist interest in differences in *earned* incomes themselves as a source of inequality, and to the possibilities of a direct attack on the latter.

These problems involve two associated questions. How far is it possible, by collective decision, to change the comparative pay of particular occupational groups enduringly and without unacceptably adverse economic effects? And how far is it similarly possible to achieve greater equality in pay generally; with the same provisos? Around the first of these questions, there is now a long history of academic debate, which centred on the role and effects in wage-determination of social or institutional factors—traditional and customary forces in differentials, the influence of trade unions and governments, the impact of ideologies or ideals.

To those involved in the institutional processes of pay-fixing, and to industrial relations specialists, the power of such factors often appeared paramount. But to the "straight" economist, both relative pay and movement in differentials appeared as largely the outcome of impersonal market forces, of the demand for and supply of different types of labour; and the possibility of interference with these forces was limited by its economic costs, in terms of unemployment or scarcity, of lost income to firms, individuals and the community, of misallocation of labour, and so on. The labour economists (rather a hybrid breed, perhaps) were more prepared to recognize the impact of such "non-market" or "social" factors—the "coercive comparison" and its like—in the pay-structure *and* its acceptability. Even so, the dominant school among them, without argument that certain main outlines of the structure were economically determined, but that market forces operated in such a way that there was some room—just how much, is examining in total arguable—for social, organizational and political forces to preserve or change particular relativities.

What reopened the academic question—and widened it into the second question, the possibility of greater pay-equality in general—was the intervention of the sociologists. These—or several of them—saw inequality in pay primarily as an aspect of inequality in general—as a reflection essentially of the distribution of social status and of power, of class order and occupational esteem, of historical and social convention and custom.

The economists might view particular sources of inequality as removable, like the effects of sex or race discrimination in the labour market: but in general they (or, perhaps, most of them) would hold inequality to be *mainly produced* by the same impersonal market forces of demand and supply as determined most particular differentials in pay—indeed, to represent a typical effect of the whole assembly of those determinations. They would thus generally see severe limits to the greater equalization of pay, defined by the likelihood of counteracting market pressures and of unacceptable economic costs. By contrast, since to sociologists the pay-structure is a social product, they would regard it as malleable in the same sense as other features of the social order. Some would see men as innately hierarchical, and thus liable only to change one structure of inequality for another. But to others, inequality is "self-perpetuating but man-made" (Goldthorpe), and consequentially, "... the existing order's most hallowed features are conventional in the strictest sense and thus subject to change originating from man's deliberate choice" (Fox). Equality, in effect, is realizable.

It is this second, and broader question, of equality in general, to which Professor Sir Henry Phelps Brown's latest discussion is addressed, though it necessarily relates also to the narrower problem, since it proceeds very largely by examining the factors that determine the main separable kinds of difference in pay. He approaches this controversy through an examination of the empirical evidence on the determination of these differentials, and by international and historical comparison of pay-structures and trends in them, rather than primarily through a process of abstract reasoning. His book in fact mainly surveys the upshot of a great number of separate studies, accumulated from many countries, of particular facets of pay-inequality—occupational differentials and their trends or changes; the relationship between the social status of different occupations and their pay; the effects of class and of intergenerational mobility between social classes; the relationships between innate intelligence, education, upbringing and income; the variance or distribution of individual earnings within occupations and at large.

The survey, as befits the author of several distinguished major studies of wages and incomes (and a member of the Royal Commission on Income and Wealth) is enormously authoritative. It is also elegantly constructed and written with a distinctive lucidity of style and reasoning. Several of its discussions are particularly fascinating. For example, a most valuable condensation of the evidence on differentials in communist economies of contrasting ideological trend—Soviet-type, China, Cuba, Yugoslavia—is combined with a diversion into the special case of real egalitarianism in the Israeli kibbutzim. An item of special interest is Phelps Brown's suggested solution to a longstanding contradiction in the apparent evidence—on the one hand, of a long-term trend for occupational differentials generally to narrow among manual workers; but on the other hand, the indication of alternate data, drawn from several countries, that the distribution of earnings among such workers (the range and "skewness" of their income spread) has remained remarkably constant over time.

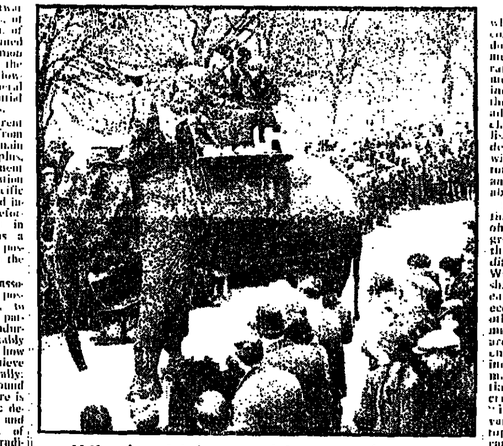
However, the overall conclusion on equality favours (not *altogether* unexpectedly?) the "economist's" view. Though market forces are subject to imperfections in their operation, to the insulation of certain enclaves (especially in public employment) from their impact, to some effect of trade union or government action, and to other limitations, they determine the broad outlines of pay inequality's structure and its general dimensions.

Differences in the pay of occupations are associated with scarce qualities measurable in intelligence quotients and educational levels. There is a similar ranking of occupations in the pay hierarchy of many different economies, including capitalist and communist ones. The social esteem of different jobs is not always closely associated with their relative pay, but may occasionally be inverse to it. The movement of major differentials over sequential phases of economic development is similar in different societies—capitalist and communist again. The distribution of individual earnings is so remarkably similar in different countries at different times that it can be argued that there is an underlying similarity in the factors generating differences in individual abilities to work.

There are other cogent arguments; but that seems the essence. However, Sir Henry distinguishes between the forces that operate *within* the labour market and those which come into play beforehand; and it is here that his main hope for greater equality is offered. The labour supply to jobs of a particular status and pay tends to be produced by parents of the same social group. Higher income parents can support their children through higher education and give them more help in entry to favourable employments: in particular, there is evidence that "cognitive ability" depends on pre-school upbringing, and that the home styles of non-manual worker parents differ so much from those of manual ones that the job ambitions and prospects of the latter's children are seriously limited.

Many people are found with IQ's which would satisfy the threshold requirements of considerably higher-paid jobs than those they hold. There is a limit to the potential return from higher education (which undermines the egalitarian hope for a major effect from more investment in the latter); but something could be done by giving more public support to poorer children between the minimum school-leaving age and university entry, and by pre-school "play-groups" to offset the disadvantage of rearing in a manual worker home.

Inequality, inequity and incentive



Why is a bishop paid more than an elephant? H. A. Turner discusses the issues of pay raised in a new book by Sir Henry Phelps Brown

This is rather thin gruel to those who hunger for equality. But how convincing, despite its monumental documentation and persuasive argument, is the analysis on which this rather meagre potential assuagement of an otherwise determinate inequality rests? Even apart from the powerful effect of "pre-market" advantage—in other words, of social class on relative earnings, the list of exceptions to the rule of demand and supply's dominance within the labour market is, if one totals it from Sir Henry's separate and detailed discussions, a formidable one.

Some have already been mentioned; others include the widely observed resistance of employee groups to a downward movement of their pay relativity; the marked difference between communist and Western economies in the relationship of white-collar to blue-collar earnings (which must be "non-economic" in one case or the other); the effect of "dual labour markets" where low-paid workers are involved in a vicious cycle of employment by low-productivity or inefficient firms; the room for managerial adjustment to differentials where higher grades are recruited by promotion in the firm's "internal labour market"; the variability in the relative height of top salaries themselves between rather similar economies (which reflects differences of "national styles" in the perquisites of management or bureaucratic power); the importance of non-economic incentives in certain cases or countries. And so on.

Taking one consideration with another, the "zone of indeterminacy" in the operation of market forces appears so substantial that one could well argue that the latter's apparent dominance, in historical and comparative observation, results only from the various and conflicting directions in which other forces have pressed. In effect, that Sir Henry has described a mechanism of inequality, but not demonstrated its inevitability.

But in any case, nobody (or hardly anybody) wants absolute equality. The total disassociation of work done from reward received—the principle of "from each according to his ability, to each according to his need"—remains a remote and near-Utopian ideal, realized to date only under very special and probably ephemeral circumstances, as Sir Henry shows from Israeli experience. Overwhelmingly, most people believe that there should be some relationship between skill or effort contributed (or risk and responsibility accepted) and payment received. The problem is not whether we can have equality, but whether we can have less inequality: and whether this can be combined with sufficient income differentiation in incomes to make the economy work well, if possible, work better (the argument of those who feel egalitarian pressures have already seriously damaged incentives is not directly dealt with).

It may be that the real issue here is not so much inequality as equity. When all allowance is made for relevant labour market factors, the scatter of earnings (for similar jobs, for instance) is often so wide that it must include a considerable element of randomness, of chance effects from specific institutional arrangements for pay-fixing, from historical accident—or from sheer luck; so that some *significant* part of pay differentiation remains unjustifiable on either economic or social grounds. At the same time, inequities of the sort our pay-fixing system seems especially liable to produce (the more so under inflationary pressure) are often powerfully discursive to those who include at some time or another a very large part of the working population—disadvantaged by them and are bound to affect performance and productivity adversely.

Could we not, by a rationalization of the pay structure, an elimination of its irrational, accidental or otherwise unwarrantable elements, combine more equality with more incentive? To repeat, at some point the problem of a rational determination of pay differentials and relativities is one that incomes policy must confront or fail. A national job evaluation system?

H. A. Turner is Montague Burton Professor of Industrial Relations at Cambridge and a fellow of Churchill College.

* *The Inequality of Pay* by Henry Phelps Brown; Oxford University Press, £7.95.

BOOKS

A valuable perspective on a crucial era

Stability and Strife, England 1714-1760
by W. A. Speck
Edward Arnold, £9.95 and £3.50
ISBN 0 7131 5974 X and 5975 8

A general history of England with volumes spanning about half a century, such as the series of which this work is a part, has clear advantages over the century-a-volume approach for the purposes of higher education, allowing for depth of treatment and considerable research detail in various fields. The one possible drawback, happily not displayed in Dr Speck's volume, lies in the danger which the scholarly textbook shares with specialist works covering relatively short periods, that of treating the subject with insufficient reference to earlier and later developments.

The task of giving due weight to residual elements of the past, and to elements of potential importance for the future, is one of the most exacting and notoriously tricky that the historian has to face; so much so that some have virtually refused to recognize such a task as being part of a historian's "brief", preferring to encapsulate "their" period in the field of vision open only to ever more powerful microscopes.

Speck's antibody to the disease to which limited-period studies is subject is indicated in his over-modest preface. This states that before he began the book his main foothold was in the years 1701-1715 and that the territory after the latter year was unfamiliar to him. He had, in fact, made a very considerable contribution to our knowledge of politics from 1701 to 1715 so that any unfamiliarity with the following period must have been relative and is now non-existent. The book is in fact an excellent survey of 1714-1760 which has the invaluable advantage of an author who knows what went before and how this affected men of Walpole's and the Pelhams' day whether they liked it, whether they admitted it (important for the historian who, after all, cannot cross-examine his witnesses), or not.

The book reflects a modern concern with a wide spectrum of society, including those members of it who were outside the political class, and with the provinces as well as Westminster; and it pays more attention, as befits a northern author, to the north of England than many older works have done. Part one, comprising over half the book, is taken up with such matters as social structure, social change, the churches, the economy and the making of the ruling class.

"The Constitution" is the only chapter in this analytical part of the volume which deals with central government. In some of the sections on social developments, as when the thesis of a "rise of the aristocracy" in the eighteenth century is discussed—and questioned—Speck's views are both illuminating and original.

Part two gives a mainly chronological account of political and diplomatic history. The highly involved treaty negotiations of the George I-Orleans diplomatic revolution, the gradual return to more normal international relationships, and the effects of both developments on British political history are skilfully presented. On the domestic side Speck is equally deft at handling the subtle relationships of Tory and Whig, court and country. His close knowledge of the "rage" and nature of parties in Anne's reign allows him to avoid such traps as considering the post-1715 Tories to be mainly Jacobite or discussing independent country gentlemen as though they were impervious to party considerations; he shows that under Walpole the Tories were the backbone of the country element, and as late as the Newcastle-Pitt administration of 1757 he carefully distinguishes between Tories and country Whigs.

By 1760, with both Tories and Whigs supporting the government, Speck sees the overt division as largely obliterated, though "it still remained like a palimpsest behind the new political order". Had his book not been completed too soon to benefit from his reading Dr Linda Colley's Cambridge PhD dissertation on "The Tory Party, 1727-1760", he might have been even more impressed by the strength of party survivals in 1760 after many decades of Whig schisms and Tory proscription. The easy revival of Whig opposition and ideology in the early years of George III's reign argues that the original writing on the palimpsest was clearly visible to contemporaries (as the "Up with Gladness down with Dismay" on a faded church banner failed to conceal an older "Up with Gladstone down with Disraeli") even in the closing years of George II's reign.

Dr Speck misses nothing of importance from the voluminous secondary literature and makes good use of a substantial range of pamphlets and manuscript sources. The book should have a long and valuable career as a major authority on the eighteenth century.

B. W. Hill

Fleecing the Flemings

The English Wool Trade in the Middle Ages
by T. H. Lloyd
Cambridge University Press, £12.50
ISBN 0 521 21239 1

Wool was the earliest commodity to be exported in great bulk from this island, and the medieval English wool trade offers a large and attractive canvas to the historian. In its heyday, the annual clip of English fleeces was eagerly sought by continental markets from Bruges to Florence. A generation ago the ancient traffic was studied intensively by Professor Eileen Power, whose premature death in 1940 left us with only the small but treasured volume of her Ford Lectures and some scattered essays. Dr Lloyd points out in his preface that not a great deal has been published on the subject since her death, though he himself has already made a major contribution to our knowledge of the wool trade with his study of English wool prices published in 1973 by the Economic History Society).

English wool was being shipped to the Netherlands soon after the Norman Conquest. Once the English had acquired the skills necessary for turning fine English fleeces into cloths of the first quality they became dangerously dependent upon the continued flow of these imports, so that even before the close of the twelfth century it was becoming habitual for the rulers of England to make political use of this dependence. It was also practicable for the English kings to raise money by taxing the wool before it left the shores. Indeed, the precocious English customs system was largely generated by the pressure on the monarchy to make what it could of the valuable commodity so exported in quantity; even the English parliament might be developed other than it did before the wool export traffic.

Flemings were not the only foreigners in quest of English wool. Particularly, it may be, after the reopening of the maritime route to Italy through the Straits of Gibraltar c. 1300, there were Florentine, Venetian, Lucchese and Genoese merchants seeking it.

Finally from the late fourteenth century onwards the wool trade was largely centralized through the compulsory staple at Calais, now in English possession. The wool was marketed there by the Company of Merchants of the Staple of England, a curious body that subsisted more in various degrees the convenience of the English crown, the English wool dealers, and their customers in the Netherlands.

Shortage of space has compelled Lloyd to pass over the links between the wool trade and sheep farming and the shipping industry, and to touches lightly on the well-documented late fifteenth century decline of an impending public menace by other hands. Eight of his nine chapters form a chronological sequence and are largely cast in a narrative mould. Lloyd uses his close knowledge of the customs figures to chart the involvement of the wool trade in the complex and changeable pattern of Anglo-Netherlands political relations.

A searching use of the historian's microscope characterizes all of Lloyd writes; he uses a fine field too, but more sparingly. A drawback of his scheme of presentation is that it hardly permits the author to offer a general picture for the purposes and methods of the Italians in the wool business, though they crop up, sometimes prominently, in almost every chapter. The evidence about wool exports to Italy is of course much more heterogeneous and dispersed than for shipments to Calais or the Netherlands.

Lloyd has written an austere book for specialists who will neglect it at their peril. He has a sharp mind and he has taken great pains in investigating the difficult customs and other records. It would be unjust to chide him for not having compressed a luminous survey such as Eileen Power might have written. Although his book does not replace her Ford lectures as the essential introduction for students, it will enjoy a long life as a reference work of reference.

G. D. Ramsay

Short cuts

The Debate on the English Revolution
by R. C. Richardson
Methuen £6.75 and £2.95
ISBN 0 416 81750 5 and 81760 2

Dr Richardson has set out to provide an account of the ways in which the English Revolution "has been interpreted and analysed by successive generations of historians". The result is sketchy as historiography; the half of the book (some 70 pages) devoted to the twentieth century becomes at times little more than an unannotated reading list. Thus C. P. Korr's book on Cromwell's foreign policy is mentioned in the same sentence as T. C. Barnard's *Cromwellian Ireland* with no indication that the first is superficial, pretentious and unoriginal, while the second is based on much original research. The contributions to Tawney's *Festschrift* are itemized without any indication that Robert Ashton's provides a different interpretation of Charles I's relations with London from that given in Valerie Pearl's book which is described on a later page. However between a third and a quarter of Richardson's text consists of quotations, so that it is all too likely to become a quarry for A level candidates and undergraduates in a hurry.

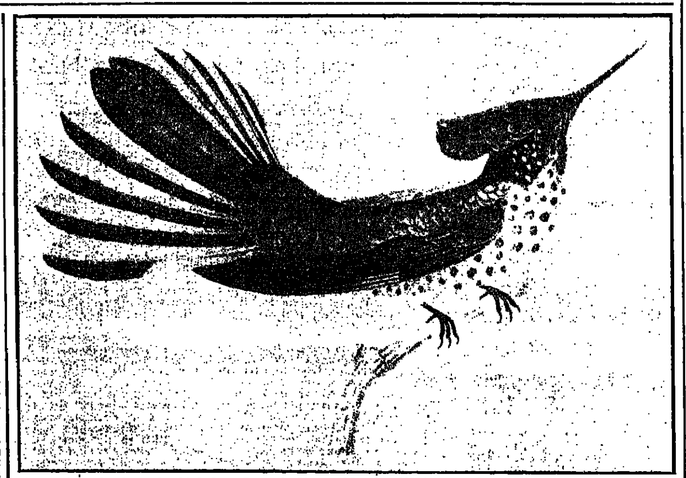
Those not seeking short cuts will certainly find some interesting perspectives in the development of interpretations. They may note, though Richardson does not, the remarkable resemblance between Guizot's interpretation of the Civil War, as a conflict between rising commercial middle classes united by religion and a weakened feudal aristocracy, and that of Christopher Hill (1940 vintage).

A major peculiarity of Richardson's coverage is that though sociological interpretations, such as those of Barrington Moore and Laslett, are discussed, those of economic historians are largely ignored.

Thus Tawney's *Agrarian Problem in the Sixteenth Century* is presented as "having opened up a new economic perspective on the English Revolution", without any mention of the extent to which his view of the destruction of the paternalistic policies of Tudor and early Stuart governments derives from Archdeacon Cunningham. Just as later there is no indication of the extent to which Hill's economic perspectives and interpretations, as against his moral judgments about them, derive from Lipson rather than from Soviet historians.

Even for an introductory sketch this seems to be too selective an approach to the historiography of the English Revolution.

J. P. Cooper



A drawing of a humming-bird, from Lesson's Oiseaux-Mouches (1831); one of many illustrations in Zoological Illustration by David Knight, published by Wm Dawson at £10.00.

Europe's earliest radicals

The Origins of European Dissent
by R. I. Moore
Allen Lane, £8.50
ISBN 0 7139 0825 4

In 1975 Mr Moore published an admirable selection of translated texts, with commentary, on the birth of popular heresy in medieval Europe. Now he complements it with a study of the beginnings of European dissent.

His books are complementary; for heresy had its medieval definition as a deviant opinion claiming a scriptural basis but opposed to the church's teaching, which was publicly proclaimed and obstinately defended. Dissent is, rather, an attitude which modern observers notice to established authority; it marks the man who, like the Henry of Lausanne whom St Bernard contradicted in 1145, "would not bow his presumptuous neck to the yoke of human obedience". Almost exactly 500 years later the Putney Debates were made famous by Reinborow's protestation that "the poorest hee . . . hath a life to live as the greatest hee"; Moore shows how the habit of dissent as thus expressed had its European origin in Henry and his like.

There had been dissent and heresy before the late-eleventh century: papal reformers sought to reform the Western Church, as there was to be in the half-century after their work. But outbreaks were sporadic, and the element of heresy was exaggerated by writers who—in intention honestly enough—coloured it by their own learned preconceptions of what heresy must be; accordingly they tended to set a Manichean stamp upon it. Paradoxically, however, it was the papalist reformers themselves who gave dissent much of its impetus, as when they challenged the validity of the ministrations of unworthy clergy. In the short term they diverted the dissenting impulse into their own protest. But the ensuing sense that "the hungry sheep look up and are not fed" gradually redirected it against Rome and the official hierarchy, when it seemed that their patron saints were still Rufinus and Albinus (red gold and white silver). Dissent broke loose again, and made peculiarly its own the widespread aspiration for a return to the evangelical simplicity of the church's earliest days.

Moore carries conviction when he argues thus, and no less in stating the corollary that dualist heresy developed slowly. There was no discernible Bogomil penetration of the West before the 1140s. It was in 1143 that Prior Eberwin of Steinfeld marked the appearance of its missionaries by summoning St Bernard to "catch us the little foxes that destroy the vines" (S of S 2:15). In 1163 Eckbert, a monk of Schonau, exposed the doctrinal system of the Rhineland Cathars with their organized church. But even their dualism was a modified one. Absolute dualism was first manifest in the Languedoc, where Bogomil-influenced dualism may not have come at all until the 1160s, and its absolute form only c. 1174.

It is a pity that Moore does not discuss so fully groups like the Waldensians and the Humiliati, which were strongly dissenting but also strenuous opponents of the Cathars. Like the parish life promoted at Liège in the 1160s by Lambert le Bègue such groups showed remarkable similarities of type, devotion and aspiration to the post-Reformation dissenting tradition.

As always, dissent presents a conservative, as well as a radical, face. Perhaps, indeed, Moore plays down its radical elements unduly. An increasingly noteworthy characteristic of dissent was a refusal to take oaths, which were, after all, the very bond of medieval society; to refuse them was a conspicuous act of social dissociation.

But these are minor criticisms of an excellent survey marked by critical judgment and by common sense.

H. E. J. Cowdrey

BOOKS

A lost culture

Welcome of Tears: The Tapirapé Indians of Central Brazil
by Charles Wagley
Oxford University Press, £8.50
ISBN 0 19 502307 6

It is not a new story that American societies of the South American rain forest are fragile structures when faced with the encroachment of Western civilization. Eating no better than hundreds of other tropical forest peoples the Tapirapé, a Tupi-Guarani speaking people of Central Brazil, have existed throughout this century in a precarious state verging on physical and cultural extinction. It is about this antedating process of decay that Professor Wagley writes in *Welcome of Tears*, his account of Tapirapé society based on his observations of it over the past 30 years.

The true villain of this history is not the tyrant or the soldier but the white man's disease, the unforeseen and now tragically certain byproduct of state expansion. In 1900 the 1,500 or so Tapirapé still extant were distributed over five viable and traditionally organized villages. By 1939, at the time of Wagley's extended and first fieldwork among these Amerindians, they had been reduced because of measles and common cold epidemics to 189 in number, and by 1940 all Tapirapé were united in one village.

From 1947 to 1950 Tapirapé society did not exist and the Tapirapé as individuals were scattered within communities of Brazilian settlers. It was during this period of complete disintegration as a society that physical extinction for them was most imminent: their population shrank to 41 in number. Today the Tapirapé have increased to 136, and for the past 20 years they have been residing together in a village which is close to Brazilian frontier-settlements. Their modern problems, the main apparently economic, are centred on coping with institutions of the Western world.

Although the Tapirapé have for now overcome the threat of physical extermination, they have lost in the name of cultural survival. The strength of Wagley's work is his success in showing more starkly than is normal that the irreversible product of rapid population decimation is equally rapid ethnocide.

Wagley had intended a study of acculturation in which would normally entail an analysis of the selective process through which a tribal culture becomes integrated into Western civilization. But there was no process of cultural acquisition to be observed; only cultural and physical loss. The barbaric structures were of the past and could no longer be supported. Thus Wagley is highly apologetic about his description of Tapirapé culture and his lack of understanding of facts that were obviously cold at the time of collection and considerably colder at the time of writing about them in the 1970s.

Wagley is also understandably angry about the dismal history he unfolds and outspoken in his concern about the future survival of Amerindians who have had Western civilization abruptly thrust upon them. He places responsibility for their survival on the shoulders of the national governments involved and on those of anthropologists who have studied among these groups. He argues on cultural grounds against the often heard excuse that the plight of millions of urban poor is a more pressing problem for national governments than that of a handful of Indians: "A myriad of cultures" will be lost to mankind if the Amerindians are not saved. I would add that to posit an opposition between concern for urban poor and concern for Amerindians is to create a false dilemma. The well-being of the one is not dependent upon the sacrifice of the other, and the continuing decimation of the Indians does not help alleviate the conditions of the urban poor.

Joanna Overing Kaplan

Population pressures

Population, Prosperity and Poverty: Rural Kano 1900 and 1970
by Polly Hill
Cambridge University Press, £8.50
ISBN 0 521 21511 0

This companion volume to *Rural Hausa: A Village and a Setting*, is one of Polly Hill's series of socio-economic studies of rural Hausaland. The main aim of the book is to compare and contrast conditions in *Dorayi*, a densely populated farming area of dispersed settlement near Kano City, with *Batagarawa* the settlement studied in *Rural Hausa*.

A second aim of the book is: "to place *Dorayi* in historical perspective by examining socio-economic conditions in rural Kano generally in immediately pre-colonial and early colonial times".

As the title suggests, the theme centres on the links between prosperity, poverty and demographic factors. For this purpose an intensive field study of *Dorayi* forms the core of the work and a basis for the analysis of the decline of this settlement from a one-time densely populated but prosperous agricultural area to its present overcrowded and impoverished condition. The survey contains much valuable information for those engaged in Hausa studies but is also important for those working on rural studies in the developing world generally. For the latter chapter five is particularly important, containing a summary of the implications of population pressures on land.

In part, the survey is based on information provided by the people of *Dorayi* and in some cases by elderly people whose memories go back to pre-colonial times, though it is regrettable that there are few places in the book where the personality and views of individuals are evident. One of the rare instances of "the people speaking" is on page 134 where a farmer, referring to absentee landlords, is quoted as saying: "they can do anything because they are rich". The potted biographies in appendix 10 are no substitute for the weaving of personal views within the general structure of the book. The insight provided by such views would have put flesh on to the bones of a statistical base which the author describes as "these extremely rough estimates" but which is nevertheless a brave attempt to quantify some of the important recent demographic trends.

While one must agree with the author that there is no longer a need to produce a book on Hausaland with a potted history, nevertheless one expects a work of historical analysis to be organized on some form of time sequence. The difficulties of structure no doubt arise from the emphasis both on a historical perspective and a comparative socioeconomic study of two settlements.

A minor criticism of the book is the constant use of abbreviations and acronyms which are listed for convenience on page XVIII. It may be necessary to use such abbreviations as PRO (Public Records Office, London) and NAK (National Archives, Kaduna) but it is difficult to see the justification for KCSZ (Kano Close Settled Zone), RH (*Rural Hausa*, the author's companion volume), DAT (*Dattijo*, Hausa for a middle aged man) and TSI (*Tsoho*, Hausa for an old man).

As the author points out, urban settlements in Hausaland account for a small proportion of the total population and yet the great Hausa cities have been the subject of most research activity. To some extent this book restores the balance of Hausa study from urban to rural issues and, criticisms apart, is an important piece of research which provides other workers in the field with much valuable information.

J. C. Moughtin

Indigenous solutions

University Development in Africa: The Nigerian Experience
by Vincent Chukwuemeka Ike
Oxford University Press, £17.00
ISBN 0 19 575421 0

The debate on the nature and role of universities in tropical Africa has gone on since long before the advent of independence, and it undoubtedly will continue. This late-1 book on the subject makes a valuable and sensible contribution to it, for it is one of the best which has been published so far. The author is a distinguished Nigerian novelist who has spent nearly 15 years as university administration in Nigeria, first at the University of Ibadan and then at the University of Nigeria, Nsukka, where at one time he was registrar, vice-chancellor and chairman of the governing council, all at the same time.

The underlying assumption of Mr Ike's book is that what African countries require are "indigenous African universities designed and equipped to serve the needs of specific African societies. They do not require American, Russian, English or French universities located in Africa".

He further believes that no university in tropical Africa has yet become a truly African university of this sort, though there are indications that some progress in this direction is being made. It is for the purpose of establishing guidelines towards such a goal that he analyses in this book the development of university experience in Nigeria and compares it with that of other universities around the world, so that he can make recommendations which, in his view, will lead more quickly to the emergence of a truly African university. His analysis covers a wide range of university topics, from the objectives of university education to the curriculum and proposals for its reform. Some are particularly related to the situation in Nigeria, like the sixth form controversy, the relationship between university and state, and the thorny problem of academic freedom in the circumstances of a young and developing country. All are discussed with conviction but with an admirable sense of objectivity.

He is deeply committed to his vision of what a Nigerian (or African) university ought to be like. He deplores the past and present dependence on foreign models, and particularly that of Ibadan or London and, perhaps to a lesser extent, that of Nsukka on Michigan State University. The Ashby Report of 1960 (the result of a commission set up to recommend on post-school education and higher education in Nigeria) comes in for strong criticism because of its suggestions that foreign models should be followed.

He insists that these and other foreign-inspired models must be rejected; Nigerian universities must create their own role and salvation.

This approach takes its inspiration from Dr Lawrence's *Road Belong Cargo* and I doubt that Ronald McSwain's work will overshadow its predecessor. The author succeeds in her attempt to confound the thesis that "conformism" is not the fragile construct some have held it to be; a set of misconceptions to be casually dropped at the first signs of economic "sophistication". Yet the overall effect of the work is disappointing. The promised "new ideas that had grown with the expansion of anthropology" (Lawrence's introduction, page viii) do not materialize. Rather, echoes of a bygone anthropology resound (". . . the belief that the disruption of social relationships caused illness encouraged social harmony . . .").

The author's avowed intention is to bring us "the villagers' point of view", a worthy approach where the end result is hoped to be a better understanding of a people undergoing a period of rapid change. But the framework remains that of the social scientist, with strict chronology in the early part of the book giving way to separate chapters concerned with reactions to economic, political and educational development programmes.

Implicit ethnocentricism pervades this approach as we are first told what "really" happened, and then "how the villagers saw it". Having set off on this course, McSwain is forced into the traditional anthropologist's corner, and must try to show why her people had so many "strange" ideas, why they "have clung to the traditional belief system"; and finds herself asking (and attempting to answer) "can there be any actual worth in beliefs not based on scientific fact?"

There is, even so, a great deal in this book which will be of value to students of New Guinea, not least the detailed accounts of the minutiae of Australian development programmes. By careful selection the reader will be able to add to the stock of what is already known about this fascinating area of anthropological research, while taking satisfaction from the main, well-proven argument of the work that not all people will, with the onset of economic development, blithely abandon their indigenous interpretations of the cosmos and its contents to embrace the European modes. The Karkar remain, it seems, puckishly, intractably, but as yet incomprehensibly Melanesian.

K. N. Patching

Eclipse of a kingdom

Church and Revolution in Rwanda
by Ian Linden
Manchester University Press, £9.95
ISBN 0 8419 0305 0

In recent years the interest of historians has turned increasingly to the role of mission churches in the pre-colonial and colonial history of African countries. Ian Linden's book contributes notably to the studies published in the past few years.

It has great advantages in its subject since it is concerned with distinctive institutions standing in clear relationship to each other: the triad of Rwanda kingdom, colonial government (first German, later Belgian) and Catholic mission, staffed by one society, the White Fathers, who dominated the field. The strength of the book and the pleasure of reading it as a narrative come from the fact that these relationships are kept constantly in focus as Linden takes the story from the pre-colonial emergent kingdom to the civil war of 1959-61, from which issued a bruised and yet still sporadically violent, independent state.

At the centre always is the kingdom: the king and the Tutsi governing class involved in a constant political game in which Hutu, making up more than 90 per cent of the population, are a subject people, clients to patrons who insistently press demands of tribute and service. The White Fathers came to this kingdom from Buganda, whose mission history is at once very different and yet in its political entanglements and religious wars evocative of Rwanda's.

Unlike the initial situation in Buganda, in Rwanda the White Fathers were kept at a distance. They upheld the authority of the king and the ruling class, but it was Hutu who came to join them at their mission centres of theocratic patronage. A Hutu church developed unconformably within the Tutsi state, whose power was consolidated by the use made of it by the colonial government and by the support given to it under mission policy. But times were changing and with the Fathers offering the education necessary for advancement there was a large-scale move to conversion by Tutsi in the early 1930s, when the leading figure of the church, Monsignor Classe, had a hand in deciding the royal succession.

Under the new "catechumenate king", state and church were closely aligned. The conflicts of the state were now internal to the body of Christians themselves: Hutu and Tutsi had both been educated by the church; now they competed for posts within and outside it; both groups had ordained abbés. In the years of nationalist aspiration the conflict emerged as one between those urging a united nationalism (with Tutsi in UNAR) and those urging social justice and democracy (with Hutu in Parmehutu). The success of Parmehutu saw the eclipse of the kingdom but did not preclude later violence—in 1963 an estimated 5,000 to 8,000 Tutsi were killed.

Linden's concern, however, is not with these headline events—the moments of intense open violence—but rather with the smaller, tributary processes preceding them. One of the marks of the book is its close concern with detail, with regional variation, its sketching of personal vignettes, none of which obscures but feeds into the larger pattern.

Although densely written, it is certainly not a dry book; at times it is very witty. For anthropologists it shows just how pallid an abstraction Maquet's account of the Rwanda kingdom is. Its analysis of the changing relationships between colonial power, traditional polity and mission church must suggest many comparisons with other African colonial states, of which Uganda is only the most obvious. But not least there is the question asked by one of the Fathers at the time of the *Tornade*, the great Tutsi conversion: "It is all very fine", he wrote in the mission diary, "but is it really the Faith that is working here and moving this crowd?" On the evidence of Ian Linden's book it would be less than just not to ask the same thing of the White Fathers.

Malcolm Ruel

Cargo cult

The Past and Future People: Tradition and Change on a New Guinea Island
by Ronald McSwain
Oxford University Press, £15.25
ISBN 0 19 550521 2

This work, the product of nearly two years' fieldwork on Kaliai Island, off the northern coast of Papua New Guinea, answers questions many anthropologists have been asking of "cargoism".

Although not famous for any particular cargo cult, Kaliai, like many of the peoples of the Red Coast, drew Europeans as spiritual inheritors of the vast wealth required to have been created by the "folk hero" Kulbob. The myth from which this "belief" is drawn is famed throughout the region, and provides the rationalization for New Guineans' relative poverty, both materially and intellectually. The book puts into an historical perspective the idea tenaciously held by many peoples of the area that this material wealth is attainable by means other than those of physical deprivation if they use to find African solutions to African problems in technological development.

This approach takes its inspiration from Dr Lawrence's *Road Belong Cargo* and I doubt that Ronald McSwain's work will overshadow its predecessor. The author succeeds in her attempt to confound the thesis that "conformism" is not the fragile construct some have held it to be; a set of misconceptions to be casually dropped at the first signs of economic "sophistication". Yet the overall effect of the work is disappointing. The promised "new ideas that had grown with the expansion of anthropology" (Lawrence's introduction, page viii) do not materialize. Rather, echoes of a bygone anthropology resound (". . . the belief that the disruption of social relationships caused illness encouraged social harmony . . .").

The author's avowed intention is to bring us "the villagers' point of view", a worthy approach where the end result is hoped to be a better understanding of a people undergoing a period of rapid change. But the framework remains that of the social scientist, with strict chronology in the early part of the book giving way to separate chapters concerned with reactions to economic, political and educational development programmes.

Implicit ethnocentricism pervades this approach as we are first told what "really" happened, and then "how the villagers saw it". Having set off on this course, McSwain is forced into the traditional anthropologist's corner, and must try to show why her people had so many "strange" ideas, why they "have clung to the traditional belief system"; and finds herself asking (and attempting to answer) "can there be any actual worth in beliefs not based on scientific fact?"

There is, even so, a great deal in this book which will be of value to students of New Guinea, not least the detailed accounts of the minutiae of Australian development programmes. By careful selection the reader will be able to add to the stock of what is already known about this fascinating area of anthropological research, while taking satisfaction from the main, well-proven argument of the work that not all people will, with the onset of economic development, blithely abandon their indigenous interpretations of the cosmos and its contents to embrace the European modes. The Karkar remain, it seems, puckishly, intractably, but as yet incomprehensibly Melanesian.

K. N. Patching

IRELAND
Widely praised
The Elizabethan Conquest of Ireland, A Pattern Established 1565-1576
Nicholas Canny £10.50
"It is very good and truly important."
G. R. ELTON
HARVESTER PRESS

BOOKS

Thou and they and the godlike I

Shakespeare's Dramatic Meditations: An Experiment in Criticism
by Giorgio Melchiori
Clarendon Press: Oxford University Press, £7.50
ISBN 0 19 812073 7

Professor Melchiori's book, though asserting that it is a study not of the sonnets as a whole, but of four or five isolated "trees out of the wood" only (numbers 94, 121, 20, 129 and 146), throws light on Shakespeare's dramatic art in its form of lyrical poetry as a whole. At the same time it is an experiment in criticism in that, from a mistrust in the validity of recent literary criticism and its practice, with its tendency to specialization, it is a demonstration of how to combine philological, linguistic, semantic, structuralist, formal and historical methods of criticism.

The introductory first chapter advocates a methodical approach permitting "the converging use of a variety of hermeneutic methods". It warns against an overemphasis on structuralistic interpretation and also against an overemphasis on content and context, whether historical or socio-economic. Against such one-sidedness Melchiori proposes to use a number of converging critical approaches for an "analysis in depth" of the four sonnets.

For this purpose he avails himself of statistics based on computerized data of the verbal material of Shakespeare's sonnets in comparison with four other sonnet groups: those of Sidney, Daniel, Drayton and Spenser. The frequency and use of pronouns serves Melchiori as a valuable criterion for the revealing preponderance of Shakespeare's use of the second person, "thou", against that of the third or first person by the other four "court" poets, as they try to establish their position in the elite world, while Shakespeare's position, as a playwright, deviates from that aristocratic norm. Melchiori, in using statistics, subtly channels the results of his findings with the help of historical and sociological considerations which "place" Shakespeare historically between a waning aristocracy and a waxing bourgeoisie.

Chapter two analyses sonnet 94, investigating the poem metrically, logically, syntactically and semantically, revealing Shakespeare's technique of juxtaposition, by which the worlds of power or politics and of nature are shown to be reflecting one another ironically in a "mirror-structure". The poem is discussed in the context of *Edward III*, whose subject, the abuse of power and corruption of morals, throws ironic light on the sonnet by means of metaphor. Melchiori uses this and other comparable works to demonstrate the pervasive irony in the octet dealing with power, while the sestet, after an open gap, "unsays" the seemingly sober political statement by a sudden complete change of the lexical code and of the metaphoric system employed.

These findings regarding the changing codes are ingeniously represented graphically, as indeed all findings are. In tracing Shakespeare's strategy of dislocating meaning, reversing traditional contexts, playing lexical codes and semantic systems against each other Melchiori detects social and economic undertones marking the change of culture of Elizabethan England.

Sonnet 121 is not a love poem, according to Melchiori, and does not address a specific "thou". It rather explores, like Sonnet 94, a moral ambiguity in terms of general human behaviour. Proceeding this time from the study of semantic values to that of logical and metrical ones, Melchiori unfolds Shakespeare's dialectic of society versus individual in isolating the two opposing semantic areas: one connected with *being* and *I*, the other with *esteeming* (or *seeming*) and *they* (or *others*), the basic contrast being, again, that of appearance and reality. The semantic pattern, again brilliantly disentangled, shows convincingly how the godlike "I" merges, in the final couplet, in the indiscriminate mass of mankind.

Melchiori criticizes recent structuralist operations on Sonnet 129, particularly those of Jakobson and Jones. But here, in spite of a meticulously careful consideration of the sonnet's original form, Melchiori's very faithfulness to it involves him more and more in a mesh of subtleties which end up by blurring the *prima facie* clarity. Chapter five, however, on Sonnet 146, using Michelangelo and Donne as norms of Christian Platonism from which Shakespeare deviates in a very characteristic way, is again a dazzingly lucid exposition of the multiple structure of this crucial poem.

It cannot be doubted that this book sets a new standard in the criticism of Shakespeare's sonnets: including, absorbing and transcending recent monistic approaches. The difficulty of doing justice to this brilliant exposition proves the very complexity and comprehensiveness of Melchiori's achievement in his attempt to do justice to Shakespeare's five outstanding and crucial sonnets with their poetic probings of fundamental human problems.

Helmut Viebrock

The play's still the thing

Aspects of Macbeth
edited by Kenneth Muir and Philip Edwards
Cambridge University Press, £6.50 and £2.95
ISBN 0 521 21500 and 29176 3

Aspects of Othello
edited by Kenneth Muir and Philip Edwards
Cambridge University Press, £6.50 and £2.95
ISBN 0 521 21499 8 and 29175 5

The economic situation is encouraging safe publishing: the established, the saleable and, above all, the inexpensive to produce are beginning to dominate the lists. Cambridge University Press's latest contributions in this sphere—two anthologies reprinting the best essays from *Shakespeare Survey* on *Macbeth* and *Othello*—are redeemed by the high quality of the essays themselves. They are excellent of their kind.

Their kind, it must be added at once, is eminently British (even when their authors are not): sound, scholarly and wholeheartedly empiricist. There is little interest in methodology and most of the essays are based squarely on the unspoken assumption that the task of the critic is to uncover Shakespeare's intentions.

The only concession to critical theory is the recognition running through both volumes that there is a contention, dating from the thirties but still giving trouble, between image-hunting (play-as-poem) and character-analysis (play-as-psychological-novel). *Othello* has probably suffered marginally more from the extremists on either side, and here the issue is further complicated in that analysts of the hero's character are still divided between ancients (the noble half-wit school) and moderns (champions of the self-dramatizing paranoiac).

The central struggle continues in these anthologies. V. Y. Kantak (character) challenges Kenneth Muir (image and symbol) on *Macbeth*; S. L. Bethell proposes an interpretation of *Othello*'s imagery, Albert Gerard of Othello's mind. But concessions are being made on each side. Professor Muir sees imagery as contributing part of our response to the play as a whole, and Mikhail M. Morozov discusses character in *Othello* in terms of recurring images. Indeed, reconciliation is perhaps not out of the question. V. Y. Kantak's extremely persuasive essay on the "actor" image in *Macbeth* demonstrates that plays differ from poems to the extent that it matters a great deal who uses which images. His interpretation, ostensibly a defence of the character approach, is a long way from Bradley. It involves close analysis of the language of the play and fully respects the distinction between life and art. Above all, by examining what happens to Macbeth's state of mind during the course of the tragedy, the essay argues convincingly that a play is more than a series of poetically expressed moral judgments. The use of the word "experience" in place of "character" throughout this important analysis might have prevented further dispute.

The recognition, of broader "dramatic values, and dramatic necessities", as Helen Gardner puts it, seems to be a relatively recent phenomenon. In G. K. Hunter's analysis of twentieth-century accounts of *Macbeth* it is not until we reach Maynard Mack in 1960 that we are securely in a world where the play has become an event perceived in a theatre (play-as-drama), in which character and imagery work in conjunction with plot, theme and structure to generate the experience of the audience. Robert S. Heilman discusses our participation in Macbeth's tragedy, but otherwise the experience of the audience is most ably treated in these anthologies by the historical critics. I enjoyed particularly Glynne Wickham's relation of the porter scene to its medieval antecedents, and Barbara Heliodora C. de Mendonça's extremely suggestive account of the parallels between *Othello* and the *commedia dell' arte*.

Finally, defying all categories, Nigel Alexander's refutation of Thomas Rymer's objections to *Othello* is a joy to read.

Catherine Belsey

Feeling true to form

Romanesque Art
by Meyer Schapiro
Chatto & Windus, £20.00
ISBN 0 7011 2239 0

In Meyer Schapiro's description, the twelfth century was a period of "cultural mobility during which the forms of art underwent a rapid change". His own studies of Romanesque art belong to as rich a context as the generations whose work they describe; that of medieval scholarship (particularly related to French sculpture) of the inter-war years.

This reprinting of Schapiro's papers shows clearly and interestingly how scholarly attitudes have changed; in the 1920s and 1930s it was a question of defining (and ever refining) something there once tangibly in the past: *Romanesque*. But such certainty was alloyed by lack of even basic information: there was the initial problem of chronology in a period which began with scant remains of very few buildings and culminated in a gathering crescendo of production in the early 1100s. But the consequence of such detailed work was to question the very point of departure; what *was* the Romanesque? So came studies to define the Romanesque of "feeling for form", a concept much in the mind of a generation for whom "Post-Impressionism", "Cubism", the "Archaic" and the Primitive described what art was about, its "form", and "movements".

As for the problems of the origin of the style, the variety of views toward some scholarly jostling with a spire of chauvinism. It is Meyer Schapiro's contribution to those questions that forms the major part—both in extent and interest—of the present volume; his definitive dating of Moissac (1929), his reading of Souillac, and the fascinating study of the still controversial St Trophime (both 1939).

What is the value of these today? Are they only worthwhile to the expert who has read them their way in the not inaccessible pages of *Art Bulletin*, *Bulletin Monumental* and various *Acta* and *Festschriften*? No; they are far more than old monographic studies to be noted as accepted or rejected in the footnotes of more recent studies. Many remain standard works. They too represent the voice of a distinguished scholar whose contribution to medieval studies has remained outside the market-place of the standard tome.

For those interested in methodology, there is less of interest. Each article plunges us into immediate detail and the rules are taken as agreed. Only seldom, as when he describes new documents on the Gilles (page 329), does he share his thoughts on method: scholarship about "style" and "historical position" is knowledge of date and adequate description. This is to be gained from analysis of the work itself and by comparison with related works. That analysis, informed by dating, gives a clear "history of development". With all this in one's mind, one returns to the original instances with new eyes.

What of Schapiro himself? Here is just volume one. Unlike many of his contemporaries he did not restrict his work to this one period. Yet what breadth and depth of knowledge are evinced in these prodigious footnotes! His generation though never exciting is unfailingly involved in creating a delicate structure of instances, we soon learn that not a word is wasted.

Stephen Chapin

Kant commentary

Kant's Metaphysics of Experience, by H. J. Paton, a detailed commentary on the first half of the *Critique of Pure Reason*, has been reprinted by Harvester Press in a new two-volume edition at £20.00.

Format and style

A Short Handbook and Style Sheet, by Thomas Pinney, and published by Harcourt Brace Jovanovich at £1.35, is a summary guide to effective writing and to essential options of format and editorial style.

BOOKS

Laws for an ordered society

The Nature of Law
by Alan Watson
Edinburgh University Press, £3.75
ISBN 0 85224 318 9

The Politics of the Judiciary
by J. A. G. Griffith
Manchester University Press, £4.95 and Fontana, £1.25
ISBN 0 7190 0702 X and 0 01 634176 4

The complementary excellences of these books are emphasized by each other's deficiencies. *The Politics of the Judiciary* is vivid, provocative, and atheoretical. Its legacy is an impression of a partisan English judiciary. In contrast *The Nature of Law* is erudite with comparisons between and arguments by analogy from legal systems ancient and modern, but its compressed argumentation sometimes makes it unreadable by anyone untrained in law and philosophy.

Professor Watson, in speculating about the nature of law, follows the tradition of political theory since Socrates, viz laws are the decisions of a political community, usually backed by sanctions, frequently decided by and in the interests of the ruling class and often involving conflict with the dictates of morality. He proceeds to analyse law in terms of legal process, i.e. the resolution of a dispute, potential or actual, by means of a decision. Accordingly the essential feature of law is the existence of an appropriate legal process. The essential functions of this process are by institution altering them, to resolve disputes and to obtain decisions validated by the process with the specific object of inhibiting further unregulated conflict. In essence law is about order—that is what society wants and gets from the institution of law. As for justice and liberty, these are only congruent with the law insofar as any particular society permits.

Violence is a necessary support to make law effective. That force which can control the force of others, or is the strongest force among those in conflict, determines what the law is, and hence what violence is to be outside the law and what inside. The fact that law's validity depends on force is masked by the interlinking in men's minds of law and justice. "Law" is apparently respectable and clothed with authority.

Watson's analysis shows law as a weapon for those controlling the state, used most frequently to maintain the status quo, but sometimes to facilitate change or to channel human behaviour by directing it along specified channels. Although law is instrumental it will not necessarily reflect prevailing material conditions or the interests of society generally or even those of the ruling elite. This is because of the tendency to borrow legal rules from other societies, the longevity of legal rules, society's tolerance of unsatisfactory law, failure to perceive the effects of such law, and inertia. Legal systems are there to get a dispute-settling decision (correct according to current legal norms) and not to provide the best possible legal rule for the society. None the less laws tend to move in line with the interests of the society as perceived by that society generally, while the interpreters of laws (Judges) also tend to act on these perceptions.

In practice Professor Griffith builds on the same premises as Professor Watson. The too short last section of *The Politics of the Judiciary* explains that the principal function of the judiciary is to support the institutions of government as established by law. Griffith maintains that he is not setting up myths (of judicial neutrality, of non-involvement in politics and of the judges as a bulwark of individual liberty) and then knocking them down by showing the judges in any modern society as upholders of order, supporters of the aims and values of the political system and protectors of the status quo. However, his presentation, unless the reader is alerted by the fine print qualifications, portrays English judges as coming from a narrow upper class, as elitist members of the establishment, as anti-worker, as anti-libertarian, as tolerant of racialism, as upholders of the rights of property owners, as willing to use archaic legal weapons against protesters, moral non-conformists, the homeless, students and trade unions and even as supporters of the Conservative party. The impression predominates of a faceless, authoritarian, reactionary judiciary—an approach symbolized on the tendentious cover of the paperback.

Furthermore, the courts are placed in a "No win" situation by Griffith. If the court releases dockers it is political; if it does not it is anti-libertarian. If courts uphold the collective interest in public order by interpretations likely to result in conviction of offenders they disregard individual liberties; if they interpret race relations legislation so as not to restrict individual freedom of conduct they are accused of failing to prevent social wrongs. It seems that if Griffith likes the result he urges that the courts should exercise power, but in contexts in which he does not like the result he criticizes its exercise.

This inconsistency arises from failure to put forward anything but the most sketchy theoretical basis explaining the role of judges as part of the machinery of government (not of *the* Government). Any reader of *The Politics of the Judiciary* must bear the following complex questions in mind (questions barely touched on by Professor Griffith).

What is the proper role of the judiciary? Since judges are appointed, how ought they to act in relationship to a democratic Parliament? Should they engage in inevitably patchy law reform? Are judges constrained by express statutory provision and by the weight of judicial precedent? How do they perceive their own functions and their proper limits? Why are the courts not monolithic—with different courts behaving differently? Why do they protect civil liberties to the extent they do? Would they, if expressly charged to protect freedoms by a Bill of Rights, give more weight to individual liberty than they do now without such a function being imposed upon them? When, bearing in mind that there is no system of administrative courts as in France to review official decisions, should they intervene to set aside bureaucratic action?

How should they behave when areas of law are uncertain or inadequate and further complicated by the necessity to balance competing interests for example, the scope of police powers, the Judges Rules and judicial discretion to exclude unfairly prejudicial evidence, the law of privacy, the law of contempt of court, the law of conspiracy? On whom should they impose the cost of measures in the social interest, for example, should they interpret for or against compulsory acquisition without fair compensation? Are they not hampered by traditions that they should not hear evidence on public policy questions thus being left at large to apply their own instinctive assessments? Would respect for their judgments (and thence the effectiveness of their role) be lessened by articulation of policy considerations?

Unless the complexities of the judicial role are constantly remembered *Griffith*'s book may reincarnate a victim of an anti-working class, anti-trade union, anti-Labour party, reactionary judiciary. Such a judiciary has been dead for half a century. It is a political disservice to raise its spectre.

C. D. Palley



George Morland, painted c.1785 by Thomas Rowlandson in pen and watercolour over pencil, from British Watercolours 1750-1850 by Andrew Wilton, published by Phaidon at £12.95.

Avoiding the pitfalls of trial by ambush

Alibi
by Richard Gooderson
Heinemann Educational, £9.50
ISBN 0 435 82357 4

This is a fascinating study, the first of its kind published in England. Gooderson's field of academic expertise, his judicial experience as a Recorder and his membership of the Justice Committee on Evidence, which reported on advance notice prior to the current legislation, renders him unquestionably an author of eminence in this field. The only other book devoting any serious attention to alibi before this was the publication by Wills on *Circumstantial Evidence* back in 1838, a book which is said to have rendered a disservice to the law of alibi by exaggerating its suspicious aspects and thereby retarding its development.

For years it was regarded as a rogue's charter, a disreputable well-worn defence put forward only by unworthy criminals. Although perhaps the commonest defence and possibly the easiest one to raise, it was not until 1967 that English law furnished any definition of alibi or made any attempt to curtail trial by ambush of the prosecution. (This marked the first inroad into the traditional criminal law privilege of the defendant to refrain from disclosing his defence until he leads his evidence at his trial. It was also the first time that the discretion to exclude defence evidence had been made available to English judges, the criminal law jurisdiction to exclude hitherto only applying to prosecution evidence.)

Almost 10 years have passed since the advent of the Criminal Justice Act 1967. What is quite startling is the very great lack of case law even now on aspects of our alibi legislation. Gooderson draws very heavily on decisions of the United States courts to illustrate many of the troublesome features of this defence.

His analysis offers indications of how the system of advance notice is working in practice and the loopholes in the protection the legislation affords the prosecution. (Pre-trial notice is not required if the defendant simply says he was not there, nor if he wishes to give alibi evidence in respect of any prior or subsequent acts the prosecution allege. No notice is required where the defendant himself offers an alibi in cross-examination or where even a prosecution witness offers it in chief. Quite apart from that, notice is only required if alibi evidence is offered in rebuttal of the prosecution case as it was established before the examining magistrate.) Obviously it is important that both sides come to trial with clear evidence of the actual distance involved in the alibi, but nowhere in this study is it emphasized that the present notice procedure actually encourages unscrupulous prosecutors virtually to retime the offence at the trial, with the result that the alibi as notified has to be disregarded as irrelevant.

The crucial scientific evidence in *R v Lattimore* (1976) must surely fall into this category. At the committal, the prosecution evidence, both medical and otherwise, put the death of Confait at a period of time during which the defendants had an alibi, and yet when they came to trial, having given notice of their alibis, the prosecution medical evidence was given in such a way that the time of death was altered drastically to the grave disadvantage of those teenage defendants. It is very much regretted that Lattimore was relegated to footnote mentions and not given the detailed treatment it warranted. Although the Fisher Report had not then been published, the report of the Court of Appeal's second look at that case was certainly available.

Identification evidence and its peripheral problems, not surprisingly, occupies a good deal of attention. In particular, there is a helpful analysis of that very difficult area, the admissibility of previous out of court identifications and the rules against prior consistent statements and hearsay. General readers not so concerned with the technicalities of identification and alibi evidence will be intrigued by those identification cases recently subjected to scrutiny by public outcry—Adolf Beck, Patrick Meehan, James Hanratty, Luke Dougherty, George Ince and Lazlo Virag to name but a few.

A very considerable section is devoted to jurisdictions outside the United Kingdom, to Scotland where advance notice has operated for centuries, to the United States where legislation was passed as early as 1927 to ensure pre-trial notice of alibi. Obviously many lessons can be learned from the United States experience in this area. Apparently the notice system is working extremely well and there is every sign of a movement towards advance notice being required of other defences. Gooderson's submission is that a system of advance notice of every defence is the fair and appropriate remedy in all jurisdictions, including the United Kingdom, to prevent the prosecution from being taken by surprise. Presumably he also advocates pre-trial notice by the prosecution of certain matters, so that the defence is not similarly ambushed. Advanced disclosure of the prosecution case in magistrates' courts, currently a matter of considerable concern, is of course outside the scope of this study, limited as it is to alibi in jury trials.

Although it will be compelling reading for all those whose interest lies in investigation of crime, procedure and evidence, it really must be classified as a comparative study. While what happens in the United States is fascinating to academics, busy practitioners may find it extremely time-consuming sifting through the cases from various jurisdictions, particularly when they are contained in footnotes not at the foot of each page but at the end of each chapter.

Jill Spruce

A great achievement of early English verse

The Alliterative Revival
by Thorlac Turville-Petre
D. S. Brewer, £7.50
ISBN 0 85991 019 8

The naturalness of alliterative verse in English, its status as a mere regularizing of habits deeply ingrained in the spoken language, must surely account for the generally high standard of accomplishment in Middle English alliterative verse. With the exception of Chaucer's work, nearly all the major English poetry of the later Middle Ages is alliterative, and there is perhaps no medieval alliterative poem of substantial length so competent as most of Lydgate's work.

Despite this, there has been no recent general study of the fourteenth-century revival—if that is what it was—of alliterative verse. Oakden's massive study, *Alliterative Poetry in Middle English*, valuable in its time, is now outdated historically, conceptually and critically, and for 40 years it has had no successor. Thorlac Turville-Petre's choice of subject for his first book is therefore welcome, and I read the book itself with keen interest throughout. I was left with several pages of detailed notes, but without any very clear general impression. Within 150 pages, Turville-Petre brings together analyses of the general nature of alliterative metre and style, speculations about the setting of fourteenth-century alliterative poetry in both social and literary history, and critical discussions of a number of specific poems.

This multifarious material is somewhat awkwardly organized. Thus an important discussion of the logical reasons for the absence of alliteration from the final stressed syllable of the line in both Old and Middle English comes in the opening chapter on "The Origins of the Alliterative Revival", rather than as part of the chapter on "Metre"; a critical account of *Winner and Waster* is found not alongside the three other individual poems discussed in chapter five, but at the very beginning of the opening chapter; and an excellent study of the important stylistic features of collocation and syntactical frame comes under the heading "Poetic Diction". Good reasons can be guessed for each such individual decision, but the overall effect is of muddled compression.

Of the separate plums entangled in the pudding, two of the most important concern the context of the revival. Turville-Petre argues that fourteenth-century alliterative verse is not the descendant of an ancient oral tradition, but is essentially a "new creation", perhaps of the 1340s. This view is buttressed in various parts of the book with analyses of the metrical nature of the line, studies of alliterative diction such as the various synonyms for "man", and suggestions of an early date for such incompetent works as Joseph of Arimathie. I do not think the long debate on the nature of the fourteenth-century revival or survival can be regarded as finally settled by his discussion, but his views are sensible and persuasive, and will certainly give the debate a new impetus by questioning old assumptions. Turville-Petre argues further that the patronage of alliterative poets was supplied by the country gentry rather than the aristocracy.

From a literary point of view, much of Turville-Petre's most valuable work lies in his analysis of alliterative metre and style. His comments on specific passages are often sensitive and revealing, and he is surely right to call for the abandonment of the misleading term "formulaic" for alliterative verse, which is largely not made up of fixed, prefabricated blocks of material, but has a close relationship with the spoken language of its time. On the other hand, his discussions of individual poems are disappointing. Given the length of his book, he inevitably has to omit overall discussion of nearly all the major alliterative poems. On *Purity*, he adds little to what has already been published; on *Pierce the Ploughman's Crede* he has some interesting remarks on the characterization of the narrator, but little else. His treatment of *The Wars of Alexander* is fuller, and includes a helpful comparison with the *Morte Arthure*, which he sees as an ambitious failure, raising moral issues that it cannot settle.

But here and elsewhere he has little to say about what is surely one of the greatest achievements of alliterative verse: its ability, like blank verse, to build up paragraphs of varied shape and pace, on the basis of an energetic syntax which carries thought or narrative forward over many lines. The division of the narrative of *The Wars of Alexander* in 16-line sections, each further divided into four-line sentences, narrowly limits this achievement, and in my view at least makes this a lesser poem than, say, *The Destruction of Troy*. There remains much scope for further critical analysis of alliterative poems; but any critic attempting this will certainly find himself indebted to Turville-Petre's valuable survey.

A. C. Spearing

This week's reviewers

Stephen Chaplin is senior lecturer in the department of fine art at Leeds University;

J. P. Cooper is a fellow of Trinity College, Oxford;

H. E. J. Cowdrey is a fellow of St Edmund Hall, Oxford and author of The Cluniacs and the Gregorian Reform;

Dr P. R. C. Evans was formerly senior lecturer in the department of education in developing countries, University of London Institute of Education;

Dr B. W. Hill is senior lecturer in English history at the University of East Anglia and author of The Growth of Parliamentary Parties 1689-1742;

J. C. Moughtin is professor of planning and director of the Institute of Planning Studies at Nottingham University.

C. D. Palley is professor of Law at the University of Kent and author of The Constitutional History and Law of Southern Rhodesia;

Keith Patching is a postgraduate student at the Institute of Social Anthropology, Oxford;

G. D. Ramsay is fellow and tutor in modern history at St Edmund Hall, Oxford. His publications include The Wiltshire Woollen Industry in the 16th and 17th centuries;

Malcolm Ruel is lecturer in anthropology at Cambridge University, and author of Leopards and Leaders;

Jill Spruce is lecturer in law at the University of Bristol.

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Universities

THE OPEN UNIVERSITY

Summer School Tutorial Staff

Appointments for one or two weeks are available at the Open University's summer schools held at universities throughout Great Britain between 8 July and 9 September.

Tutor Posts in the Faculties of Arts, Mathematics and Science
There will be a certain number of TUTOR posts in the following subject areas:
Art History, Architecture and Design, Drama, History, Music, Philosophy, and Literature (the Novel – final year of presentation).
Mathematics: courses coded M101, M201, M202 and MST281.
Biology (all subdisciplines including Genetics), Chemistry (organic, inorganic and physical), Earth Sciences and Physics.

Tutor Posts in the Faculty of Technology
Tutors qualified in Elementary Mathematics and Modelling (for technologists), Materials Science Technology, Systems (design, planning, implementation, management, analysis, modelling of social or technical systems).
TS282 – Electromagnetics and Electronics
T291 – Instrumentation.
Tutors qualified in electronics and/or instrumentation; previous teaching experience an advantage.
TAD292 – Art and Environment
Tutors to run creative project work in visual arts, sound, theatre, dance, environmental design, creative writing and community publishing.

Tutor Posts in the Faculty of Social Sciences
D101 – Making Sense of Society
Tutors qualified in one or more of: economics, geography/town planning, politics/international relations, psychology, sociology; to teach in one of the three interdisciplinary modules: housing, sex and gender in society, a political simulation exercise on the Bosnian crisis, 1908-9.
DS261 – An Introduction to Psychology and
D303 – Cognitive Psychology
Tutors qualified in experimental psychology; for D303 computer experience desirable.
D204 – Fundamentals of Human Geography
Tutors qualified to teach modern geography, especially with reference to urban retailing, rural social geography and statistical techniques.

Demonstrator Posts
Applications for the post of DEMONSTRATOR are invited from graduates in the Sciences to work in the areas of Biology, Chemistry, Physics and Earth Sciences; from graduates in the Sciences and Engineering to work in the areas of Acoustic Measurement, Electronics, Materials Science, Systems, Structures, Energy Conversion, Metallography, Design, Production Systems, Environmental Science and Computing; also from graduates in Psychology.

Application Procedures
For further particulars and an application form, send a *postcard* with your name and address to the Tutors Office, (SS 2) P.O. Box 92, Milton Keynes MK7 6AU. All completed application forms must reach the Open University by Monday, 6th February 1978.

UNIVERSITY OF MELBOURNE
JUNIOR RESEARCH FELLOW DEPARTMENT OF MATHEMATICS

Applications are invited for a post-doctoral Junior Research Fellowship in the Department of Mathematics from candidates with suitable qualifications in statistical mechanics. The Fellowship is funded by an ARBG grant for a project titled "Statistical Mechanics of Liquids and Liquid-Solid Interfaces". The appointment is for a period of up to two years and includes a contribution towards travel expenses.
SALARY: $A12,160-$A13,390 per annum.
The appointment will commence as soon as possible.
Enquiries may be directed to Dr. E. R. Smith, Department of Mathematics.
Further information, including details of application procedure, is available from The Registrar. Applications referring to Position Number B16933 should be addressed to The Registrar, University of Melbourne, Parkville, Victoria, Australia, 3052. Closing date for applications is 28 February, 1978.

UNIVERSITY OF ST. ANDREWS
RESEARCH FELLOW IN STATISTICAL COMPUTING

Applications are invited for a research fellowship to review and develop further statistical methods for exploratory data analysis. Postgraduate research experience is required, with a strong background in statistics, a working knowledge of computer methods and statistical software is essential.

The appointment will be for 2 years in the first instance, with the possibility of extension. Salary on Research Range 1A £3,333-£6,627 plus U.S., starting point depending on qualifications and experience.

Applications (2 copies) including a curriculum vitae and the names of 3 referees should be sent by 24th February to Mr. M. Weatherill, Department of Computational Science, University of St. Andrews, Fife, KY16 9SX, from whom further particulars may be obtained.

UNIVERSITY OF NEW ENGLAND
Armidale, New South Wales
PROFESSOR OF ANIMAL SCIENCE

The University of New England is seeking to fill the vacancy created by the impending retirement of Professor N. T. M. Yeates as Professor of Livestock Production.

As Professor of Animal Science the appointee will be responsible for further developing the Department of Animal Science (the proposed name for the present Department of Livestock Production) and will be appointed its Head for an initial five year period. In that capacity he will also be responsible, in consultation with the departments involved, for coordinating all undergraduate animal science teaching in the Faculty of Rural Science.

At present undergraduate teaching activities of the Department of Animal Science involve three courses in Rural Science and five in Economic Studies, all involving applied aspects of animal production. Research and postgraduate programmes and facilities presently encompass the fields of meat science, wool science, applied reproduction, growth and development, and animal climatology.

The appointee must have high standing in a field of animal science and will be expected to develop further the Faculty's association with Australian agricultural industries.

Informal enquiries should be directed to the Dean of the Faculty of Rural Science, in the University.

Conditions of Service include assistance with travel and removal expenses and assistance to buy or build a home.

Superannuation will be on the FSSU pattern but members of the NSW Superannuation Scheme may continue in that scheme if they wish.

Study leave is available and credit may be given for existing entitlements.

Salary : $A30,786 per annum.

Further particulars relating to this chair from the Association of Commonwealth Universities (Appointments) or Staff Officer, University of New England, as appropriate.

Applications should include full details of qualifications, experience, research interests and publications and the names and addresses of three referees.

Applicants in the United Kingdom, Europe and America should forward their applications to the Secretary General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, and send a copy to the Staff Officer.

Other applicants should forward their applications to the Staff Officer, University of New England, Armidale, New South Wales, Australia, without delay.

Closing date for applications 24 February, 1978.

BELFAST
The Queen's University
DEPARTMENT OF CHEMISTRY
POSTDOCTORAL RESEARCH FELLOW/ RESEARCH ASSISTANTS

Applications are invited for three positions for work with Dr. J. J. Rooney and Professor R. C. Pitt on the mechanism of olefin metathesis, especially in relation to the ring-opening polymerization of cycloalkenes:
1 Research Fellow : £3,333-£4,401 (under review) with FSSU/USS.
2 Research Assistants : £2,904-£4,190 (under review) with FSSU/USS.

One research assistant post will be tenable for two years. The other posts will be tenable for one year initially and may be renewed annually for further periods. Commencing salary will be at point appropriate to age, qualifications and experience.

Applications, giving a curriculum vitae and the names and addresses of two referees, should be sent to The Personnel Officer, The Queen's University of Belfast BT7 1NN as soon as possible

UNIVERSITY OF NAIROBI–KENYA

Applications are invited for the following posts in the DEPARTMENT OF LAND DEVELOPMENT.

1. PROFESSOR/ASSOCIATE PROFESSOR. Applicants must be professionally qualified in either Valuation and Estate Management or in Quantity Surveying with higher degrees and proven research experience in a University or equivalent institution in any of the following fields : Urban or Rural Land Appraisal, Urban or Rural Land Economics, Housing Management, Taxation of Land, Building Economics and Construction Management and Economics. Considerable teaching experience commensurate with this grade will be an advantage. The appointees will be expected to give leadership in either the field of Building Economics or Land Economics both at the undergraduate and postgraduate levels. They shall also be expected to carry out research work in various professional fields relevant to the developing country.

2. TWO SENIOR LECTURERS. Applicants should be professionally qualified Surveyors with higher qualification in either Valuation and Estate Management or Quantity Surveying. They should have considerable experience in teaching and research work. Besides the teaching of undergraduates the appointees will be required to supervise postgraduate students and to research in fields relevant to a developing country.

Salary scales : Professor KE4,320-KE5,100 pa ; Associate Professor KE3,600-KE4,128 pa ; Senior Lecturer KE2,772-KE3,600 pa (KE1.35 sterling). Salaries are currently under review. The British Government may supplement salaries in range £4,128-£4,574 pa (sterling) for married appointees or £2,880-£3,384 pa (sterling) for single appointees (normally free of all tax and reviewed annually) and provide children's education allowances and holiday visit passages. FSSU ; family passages ; various allowances. Detailed applications (two copies) including curriculum vitae and naming three referees should be sent airmail to Registrar (Recruitment and Training), University of Nairobi, P O Box 30197, Nairobi, Kenya. Closing date 27 January, 1978. Applicants resident in UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further details may be obtained from either address.

Colleg Prifysgol Cymru
The University College of Wales
Aberystwyth

OFFICE OF PRINCIPAL

The Council of the College has established a Committee of Selection to consider the appointment of a Principal, to succeed Sir Goronwy Daniel in October, 1979. The particulars of the appointment may be obtained from the Registrar, Old College, King Street, Aberystwyth, SY23 2AX.
Those who wish their names to be considered should submit an application to the Registrar by 27th January, 1978. The Committee of Selection will not necessarily confine its consideration to those who apply in response to this advertisement.

ULSTER :
THE NEW UNIVERSITY
EDUCATION CENTRE
LECTURERS IN EDUCATION EDUCATIONAL TECHNOLOGY; CURRICULUM STUDIES— HISTORY

Applications are invited for two full-time lectureships within the Education Centre, which are available from 1st March, 1978.
Educational Technology (Ref. 77/175): Candidates should be honours graduates with experience of teaching in schools and preferably with an interest in the history of education.
In the case of both lectureships qualifications in the advanced study of education would be an advantage.
Salary: £3,333-£6,855 per annum (with FSSU/USS)
Further particulars may be obtained (specifying which lectureship and quoting appropriate reference number) from The Registrar, The New University of Ulster, Coleraine, Northern Ireland BT52 1SA, to whom applications, including a tabulated curriculum vitae and names and addresses of three referees, should be sent not later than 27th January, 1978.

University of Wales
UWIST

LECTURER
CIVIL ENGINEERING

Salary: £3,333-£6,655

Requests (quoting reference THES) for details and application form to Personnel Section (Academic), UWIST, Cardiff CF1 3NU.

Closing date : February 3, 1978.

BELFAST
The Queen's University
CHAIR OF LOGIC AND METAPHYSICS

Applications are invited for the Chair of Logic and Metaphysics tenable from 1st October, 1978, on the retirement of Professor J. A. Faris. The salary (under review) is £8,798 per annum with contributory pension rights under the FSSU/USS. Assistance with removal expenses is available.
Further particulars may be obtained from the Personnel Officer, The Queen's University of Belfast, BT7 1NN, Northern Ireland. (Please quote Ref. 78/THES) Closing date : 17th February, 1978.

Universities continued

PAPUA NEW GUINEA
UNIVERSITY OF TECHNOLOGY
Invites applications for a
PROFESSOR AND HEAD OF DEPARTMENT OF ACCOUNTANCY AND BUSINESS STUDIES

The Department of Accountancy and Business Studies forms the Faculty of Business Administration, and administers four-year courses for the accountancy and business studies streams of the Bachelor of Technology Degree and the five-year Bachelor of Commerce Degree. The Department conducts courses in accounting, financial management, economics, social psychology, personnel management, industrial relations, public administration, marketing, advertising, quantitative techniques, development economics and other related topics.
The University is seeking an academic with appropriate industrial or commercial experience who will have demonstrated the potential capacity to give strong leadership to the Department and the ability to contribute to existing courses as well as to develop professional and postgraduate courses relevant to the needs of accounting and management in Papua New Guinea.
The structure of the University is currently under review and it is possible that at some time in the future the Department of Accountancy and Business Studies may be divided into two departments : Business Studies, and Accounting and Financial Management. If this should occur it is envisaged that the person appointed would become the head of one of the departments appropriate to his experience and area of interest.
The salary level will be that of a professor K20068 (Kina 1 approx. 0.73p, US$1.30, Australian $1.15).
APPLICANTS WHO RESPONDED TO THE ORIGINAL NOTICE WILL AUTOMATICALLY BE CONSIDERED FOR THIS REVISED POST, AND ACCORDINGLY NEED MAKE NO NEW APPLICATION.
Allowances additional to salary are payable as follows: married K2,300 per annum, single K1,300 per annum. In certain circumstances a child allowance of K166 per annum is also payable. An educational allowance and additional fares may be provided for children being educated away from their parents place of residence. Other benefits include furnished housing (hard goods only) supplied at nominal rental, leave fares to place of recruitment every second year and equivalent fares to Canberra, Australia, each alternate year, and six weeks' annual leave. Superannuation benefits apply in most circumstances. Study leave of six months will accrue after five completed semesters service (all conditions are currently under review).
Appointment will be on a contract basis for a maximum of six years in the first instance. The University reserves the right to make no appointment or to make an appointment by invitation at any stage.
Applications, in duplicate, should include particulars of age, nationality, marital status, family if any, qualifications, experience, present post and the names and addresses of three referees from whom confidential enquiries can be made. Further information will be forwarded to all applicants. Applications should be sent before 30 January, 1978, to the Registrar, The Papua New Guinea University of Technology, P.O. Box 783, Lae, Papua New Guinea. A copy of the application should also be sent to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

UNIVERSITY COLLEGE GALWAY
PROFESSORSHIP OF ANCIENT CLASSICS
PROFESSORSHIP OF APPLIED GEOPHYSICS
PROFESSORSHIP OF MODERN ENGLISH
LECTURESHIP IN LAW

Applications are invited for the above full-time statutory posts.

Salary Scales : Professorship, £8,552 by (8) to £10,076. Lectureship, £6,394 by (8) to £8,491.

Marriage and family allowances are also payable. Closing date for receipt of applications for Professorships of Ancient Classics and Modernng English and Lectureship in Law January 25, 1978; closing date for Professorship of Applied Geophysics February 1, 1978. Further information may be obtained from the Registrar.

Opening anticipated for a senior level appointment. Areas of concern :
1) **experience teaching at Graduate level and good publication record required ;**
2) **dramatic literature/theory ;**
3) **stress on Continental drama and/or non-Western drama preferred.**

Ph.D. required. Résumé and/or placement files requested to be sent by deadline of March 1, 1978. An Equal Opportunity/Affirmative Action Employer. Correspondence and résumé should be sent to: Department Chairman, Department of Dramatic Art, University of California, Santa Barbara, Ca. 93106, U.S.A. Deadline to apply is March 1, 1978.

Classified Advertisements
To advertise in The THES
phone
Lorraine Williams 01-837 1234
Extn 575
THE TIMES
Higher Education
SUPPLEMENT
New Printing House Square, P.O. Box 7
Gray's Inn Road, London WC1X 8EZ

UNIVERSITY OF DUBLIN
CHAIR OF LATIN
(1870)

Applications are invited for appointment to the above post which will fall vacant on 1 October 1978, following the retirement of the present holder Professor D. E. W. Wormell.
Further particulars, both of the present activities of the department of Latin and of the School of Classics, together with conditions of employment to the Chair and to the Headship of the department, may be obtained from
Mr. G. H. H. Gilltrap,
Secretary to the College,
Trinity College,
Dublin 2,
to whom formal application should be made, preferably not later than 23 January, 1978.

UNIVERSITY OF DUBLIN
Trinity College
CHAIR OF CHEMISTRY
and
HEADSHIP OF DEPARTMENT

Applications are invited for appointment in the most which will fall vacant on 1 October, 1978, following the retirement of the present holder Dr. Wesley Cocker. While the University is committed to an appointment solely in one field of Chemistry, applications from persons with a special interest in Inorganic Chemistry will be particularly welcome.
Further particulars, both of the present activities of the department of Chemistry, and of the conditions of appointment to the Chair and to the Headship, may be obtained from:
Mr. G. H. H. Gilltrap, Secretary to the College,
Trinity College, Dublin 2.
to whom formal application should be made, preferably not later than 23 January, 1978.

KENYATTA UNIVERSITY COLLEGE, KENYA
(A constituent College of the University of Nairobi)
Applications are invited for the following posts :—
1. SENIOR LECTURER/LECTURER IN BUSINESS EDUCATION.
Applicants should hold at least a Master's degree in Business Education / Administration, Accounting, or Economics and should have substantial experience in teaching and/or research at University level. The appointee will be expected to teach Economics and one or more of the following courses : Accounting, Business Finance, Business Law, Business Statistics, Marketing, Computer concepts.
2. SENIOR LECTURER/LECTURER IN PHYSICAL EDUCATION. Applicants should have a good University degree, with specialized qualifications in three or more fields, and be in possession of professional teaching qualifications. Preference will be given to candidates with several years' experience of teaching the subject in post secondary school institutions. The appointee will be expected to teach undergraduate courses in Physical Education and to initiate, plan and supervise Research in the Department.
Salary Scales : Senior Lecturer KE2,772-KE3,600 p.a. Lecturer KE1,800-KE3,096 p.a. (KE1=£1 35 sterling). The British Government is unlikely to provide salary supplementation and associated benefits. Terms of service include subsidised housing, membership of SSSF or FSSU and a non-contributory medical scheme and family passages. Detailed applications (two copies) including a curriculum vitae (applicants should give three names of Academic referees and their addresses and at the same time request them to send their references direct to the Registrar without delay), should be sent by air mail not later than 30 January, 1978, to the Registrar, Kenyatta University College, PO Box 43844, Nairobi, Kenya. Applicants resident in UK should send one copy to the Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

ESSEX
THE UNIVERSITY
LECTURER IN TELECOMMUNICATIONS IN THE DEPARTMENT OF ELECTRICAL ENGINEERING SCIENCE

Applications are invited for the post of Lecturer in the above Department (£5,355 to £6,855 on the 1st July of Telecommunication switching systems for appointment from 1 October, 1978. Candidates should be interested in both undergraduate and postgraduate courses in switching, switching systems, and preferably should have a research interest in software techniques applied to modern switching systems.
Applications (six copies), including a curriculum vitae and the names and addresses of three referees, should be sent to the Registrar and Secretary, The University of Essex, Wivenhoe Park, Colchester CO4 3SQ, from whom further particulars may be obtained, by 27th January, 1978.

DURHAM
THE UNIVERSITY
Applications are invited for the following appointments in the Faculty of Science from 1 October 1978 (or thereafter) with the possibility of superannuation pooling in the case of appointments to established posts :
Demonstrator in Mathematics (£3,333-£4,401 under review).
Applications (six copies) including a curriculum vitae and the names and addresses of three referees, should be sent to the Secretary, Science Faculty Office, Durham, DH1 3LE, to whom applications (3 copies) including curriculum vitae and the names of referees should be sent not later than 3 February, 1978.

ESSEX
THE UNIVERSITY
LECTURER IN THE DEPARTMENT OF LITERATURE

Applications are invited for the post of LECTURER in the field of MODERN DRAMA from 1 October 1978 (or thereafter) on appointment from October 1978 (salary scale £3,333-£6,855 under review).
Applications (six copies), including a curriculum vitae and the names and addresses of three referees, should be sent to the Registrar and Secretary, The University of Essex, Wivenhoe Park, Colchester CO4 3SQ, from whom particulars may be obtained, by January 23rd, 1978.

LONDON
BEDFORD COLLEGE
(University of London)
LECTURER IN PHYSICS

Applications are invited for a lectureship in physics from October 1978. Preference will be given to applicants with experimental physics which involves the use of computers. Salary will be within the scale £3,333 to £6,855 per annum under review.
Applications (six copies) including a curriculum vitae (applicants should give three names of referees and their addresses) should be sent to the Registrar, Bedford College, Regent's Park, London NW1 4NS (telephone 01-486 4400, Ext. 474).

LANCASTER
THE UNIVERSITY
DEPARTMENT OF CLASSICS AND ARCHAEOLOGY

Applications are invited for the vacant post of LECTURER in ROMAN BRITAIN AND ARCHAEOLOGY.
Salary on the scale £3,333 to £6,855 per annum.
Further particulars may be obtained (quoting reference 1/78) from the Registrar, The University, Lancaster LA1 4YW, to whom applications (three copies) should be sent by 1st February, 1978.

OXFORD
THE UNIVERSITY
UNIVERSITY LECTURESHIP IN CLASSICAL ARCHAEOLOGY

The electors intend to proceed to an election to the Lincoln Professorship of Classical Archaeology and Art and to the University Lectureship in Classical Archaeology and Art tenable with a Fellowship at Magdalen College.
Applications (nine copies) should be sent by 1st February, 1978, to the Secretary of the Faculty of Literae Humaniores, Examination Schools, High Street, Oxford, from whom further particulars may be obtained.

NEW ZEALAND
UNIVERSITY OF OTAGO
Dunedin
CHAIR OF BOTANY

The University Council invites applications for the Chair of Botany, which will fall vacant at the end of 1978 on the retirement of Professor R. M. Laws.
Preferred subjects within the range of Botanical sciences are strongly encouraged, but applications from persons with a special interest in Inorganic Chemistry will be particularly welcome.
Further particulars and conditions of appointment may be obtained from the Registrar, University of Otago, Dunedin, New Zealand, to whom applications (three copies) should be sent by 31st March, 1978.

OXFORD
THE UNIVERSITY
MARSHAL LECH PROFESSORSHIP OF FRENCH LITERATURE

The electors intend to proceed to an election to the Marshal Foch Professorship of French Literature, which will fall vacant on 30th September, 1978, by the resignation of the professor who will be retiring.
Applications (nine copies), including three references, should be sent by 1st March 1978 to the Registrary, The University, Oxford, from whom further particulars may be obtained.

THE OPEN UNIVERSITY
ASSISTANT SCIENTIFIC OFFICER—Systems

Development of Student-Centred Learning Activities

The Systems Group, in the Faculty of Technology, has extensive use of student-centred activities from first-year courses with circa 4,000 students to computer-based modelling, to undergraduate Project Management. Its staff are mostly specialists in Operational Research, Systems Engineering and Management.
The Professor of Systems will be expected to take a leading role in the development and teaching of systems engineering and management, in addition to responsibility for the organisation of research and teaching activities in Systems Studies in the University. Appointed in the 1978 academic year, the Professor in Systems will be able to develop effective relationships with the professional bodies in systems engineering on a local and national level. It is anticipated that especially close liaison will be maintained with the Systems Institute of New Zealand, through which financial support for the Chair in Systems is provided. Enquiries to Dr. Brian of the Institute of Systems Science, The Open University, Walton Hall, Milton Keynes MK7 6AA, or telephone Milton Keynes (0908) 74066, ext. 2926. Closing date for applications, January 23rd, 1978.

THE OPEN UNIVERSITY
FACULTY OF TECHNOLOGY
LECTURESHIP IN ENGINEERING MECHANICS

Applications are invited for the post of Lecturer in Engineering Mechanics in the Faculty of Technology.
The faculty places considerable emphasis on interdisciplinary and interfaculty studies and welcomes applications from specialists with broad interests in the current course production programme. Experience of engineering design and practical work would be particularly welcome.
Teaching, research and industrial experience, together with an ability to communicate via the written word will be considered in selection.
Salary will normally be within the range £3,333 to £6,855 per annum, under review. Starting salary will depend on qualifications and experience. Initial appointment will be for 3 years, but may be renewed thereafter by mutual agreement.
Application forms and further particulars are available from the Personnel Manager, The Open University, Walton Hall, Milton Keynes MK7 6AA, to whom they should be returned as soon as possible.

NEW ZEALAND
MASSEY UNIVERSITY
Palmerston North
PROFESSORSHIP IN BANKING

The newly established Chair in Banking is the third professorship in the Business Studies Department in the Faculty of Business. Two other professorships are in Business Studies and Accounting and Financial Management.
The Professor of Banking will be expected to take a leading role in the development of teaching and research in his or her discipline in the University, in addition to undertaking responsibility for the organisation of research and teaching activities in Banking Studies in the University. Appointed in the 1978 academic year, the Professor in Banking will be able to develop effective relationships with the professional bodies in banking on a local and national level. It is anticipated that especially close liaison will be maintained with the Institute of Bankers in New Zealand, through which financial support for the Chair in Banking is provided. Enquiries to Dr. Brian of the Institute of Systems Science, The Open University, Walton Hall, Milton Keynes MK7 6AA, or telephone Milton Keynes (0908) 74066, ext. 2926. Closing date for applications, January 23rd, 1978.

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Application forms and further particulars are available from the Personnel Manager, The Open University, Walton Hall, Milton Keynes MK7 6AA, to whom they should be returned as soon as possible.

NORWICH
UNIVERSITY OF EAST ANGLIA
TEMPORARY LECTURESHIP

In MODERN EUROPEAN HISTORY to take up the duties of Lecturer under Scale for Lecturers and Senior Lecturers (£3,333-£6,855 under review) as soon as possible thereafter.
Applications (six copies) should be sent to the Registrar, University of East Anglia, Norwich NR4 7TJ, from whom further particulars may be obtained.
Applications close on 31st January, 1978.

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Further particulars and conditions of appointment may be obtained from the Registrar, University of Otago, Dunedin, New Zealand, to whom applications (three copies) should be sent by 31st March, 1978.

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Applications (nine copies), including three references, should be sent by 1st March 1978 to the Registrary, The University, Oxford, from whom further particulars may be obtained.

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The Professor of Systems will be expected to take a leading role in the development of teaching and research in his or her discipline in the University, in addition to undertaking responsibility for the organisation of research and teaching activities in Systems Studies in the University. Appointed in the 1978 academic year, the Professor in Systems will be able to develop effective relationships with the professional bodies in systems engineering on a local and national level. It is anticipated that especially close liaison will be maintained with the Institute of Systems Science, The Open University, through which financial support for the Chair in Systems is provided. Enquiries to Dr. Brian of the Institute of Systems Science, The Open University, Walton Hall, Milton Keynes MK7 6AA, or telephone Milton Keynes (0908) 74066, ext. 2926. Closing date for applications, January 23rd, 1978.

YORK
THE UNIVERSITY
CENTRE FOR SOUTHERN AFRICAN STUDIES
RESEARCH FELLOWSHIP

An economist is required to spend a period of 12 months (or six months by mutual agreement) researching into aspects of the economic consequences of the Zimbabwe settlement from South Africa's point of view. Salary on the range £5,355 per annum under review.
Four copies of applications (one only from overseas candidates) naming three referees, should be sent by Monday 23 January 1978, to Dr. Stephen Brier University of York, Heslington, York, YO1 5DD, from whom further details may be obtained. Please quote reference number 6/2676.

Universities continued

READING
THE UNIVERSITY

Applications are invited from University GRADUATES for the post of ASSISTANT to the Head of Education. Candidates should have experience and/or interest in administration and in educational issues. The appointee will take office on 1 October, 1978.

Further information may be obtained from the Registrar (Room 215, Whiteknights House, The University, Whiteknights, Reading RG6 2AH), by whom applications should be received not later than 11 February, 1978.

SURREY
THE UNIVERSITY
FACULTY OF ENGINEERING
LECTURER IN MECHANICAL ENGINEERING

The Faculty of Engineering wishes to appoint a lecturer in the field of the Thermofluids Engineering Group. The duties will include an industrial approach to the laboratory engineering of tutorials and lectures and a year's period of industrial training.

The person appointed will be required to devise and implement courses in one or more of the following fields: Mechanics, Heat and Mass Transfer, Stress Analysis, Vibration. He also will also be required to assist the Course Director with the administration and development of the courses, and to take part in industrial liaison, personal and teaching duties, in accordance with the policies of the University. Industrial experience in the field of specialization would be an advantage. An interest in facilities for engineering craftsmanship within the undergraduate curriculum is essential.

Salary will be within the range £5,751 to £9,651 per annum with superannuation under USS Scheme.

Further particulars of the post may be obtained from the Academic Registrar (Ref. Surveyor), University of Surrey, Guildford, Surrey GU2 5XH, or telephone Guildford 71281, extension 2160.

Applications, from men and women in the form of a curriculum vitae, including the names and addresses of two referees, should be sent to the undersigned not later than 6 February, 1978.

THE OPEN UNIVERSITY
ACADEMIC ADMINISTRATION DIVISION

SENIOR ASSISTANT SECRETARY
(Continuing Education)

Applications are invited for the new post of Senior Assistant Secretary (Continuing Education) on MAP Grade IIA (£6,435 to £7,251 per annum—under review).

Duties will include secretarial duties for the Continuing Education Committee and its Sub-Committees, and the preparation of administrative advice in support of the University's planned development in continuing education.

Candidates should be graduates with substantial administrative experience in an educational context.

Further particulars and application forms are available from the Personnel Manager (Ref. 78), The Open University, 12 Hawley Crescent, London NW1 8TA, or by telephone 01-267 7411, extension 2156. Closing date for applications: 24.1.78.

SOUTHAMPTON
THE UNIVERSITY
CHAIR OF ENGINEERING MATERIALS

Applications are invited for the establishment in the Chair of Engineering Materials (vacated by Professor F. J. Bell on his appointment as Director of the National Institute of Agricultural Engineering).

Further particulars may be obtained from the Academic Registrar, The University, Southampton, SO9 5NH, and applications (12 copies from applicants in the United Kingdom) must be submitted before 31 January, 1978.

SHEFFIELD
THE UNIVERSITY
DEPARTMENT OF BUILDING SCIENCE

Applications are invited from men and women for the following:

RESEARCH ASSISTANT, Range 1A, and Research Assistant Range 1B, for a post at Range 1A up to £3,762 a year.

Tenable for three years, to work on the environmental performance of buildings with special reference to energy conservation, solar energy and climatic design using interactive computing techniques. Postgraduate research experience in building science, mathematical modelling, building climatology, physics or some related discipline, plus some experience in computer programming is required. Post 1B may be up to £3,501 a year.

Tenable for three years, to work on the assessment of dynamic wind pressures on buildings using small scale dynamic models in wind tunnels. Postgraduate research experience in engineering research required. Knowledge of structural dynamics and/or wind computer analysis would be useful.

Post 1C: Range 1B up to £3,219 a year.

Tenable for one to two years. To work on investigations into the transmission of low frequency sound and vibration in relation to noise radiation in relation to noise radiation in buildings, using fluctuating heat transfer techniques. Graduate with experience in Applied Climatology, Applied Mechanics or Environmental Science required. Experience in the use of digital computers would be an advantage.

Further particulars from the Registrar and Secretary, The University, Sheffield S10 2TN to whom applications should be sent by January 23rd, 1978. Quote Ref. B.T.2 DE.

READING
THE UNIVERSITY

Applications are invited for the following posts, tenable from 1 September 1978 or such later date as may be agreed:

LECTURER in the Department of Agricultural Economics and Management, with special responsibility for teaching and research in the economics of agricultural marketing.

LECTURER in the Department of Agricultural Economics and Management, with special responsibility for teaching and research in the economics of agricultural production.

Salary scale £3,744 to £8,985 per annum.

Further information may be obtained from the Registrar (Room 211, Whiteknights House), The University, Whiteknights, Reading RG6 2AH, to whom applications should be received not later than 17 February, 1978.

WALES
THE UNIVERSITY
UNIVERSITY COLLEGE OF SWANSEA
CHAIR OF GEOGRAPHY

The Council of the College invites applications for the appointment as a Professor of Geography from August 1, 1978, or as soon as possible thereafter, consequent upon the retirement of Professor W. G. V. Balchin.

Further particulars may be obtained from the Registrar-Secretary, University College of Swansea, Singleton Park, Swansea SA2 8PP, to whom applications (12 copies) should be returned by February 20, 1978.

Aneurin Bates, Registrar-Secretary.

NORTH WALES
UNIVERSITY COLLEGE
DEPARTMENT OF ECONOMICS

Applications are invited for the post of LECTURER in Economics from graduates with a preference for those with Regional Economics. Candidates for the post will be expected to undertake research and teaching in Economic Base Theory and Regional Econometrics. Consideration will be given to the appointment of a Research Assistant in Economic Research.

Salary will be on the scale £3,744 to £8,985 per annum.

Applications, by letter, together with full details of education and experience, together with the names and addresses of three referees, should be sent to the Assistant Registrar (Personnel), University College of North Wales, Bangor, Gwynedd LL57 2DG, to whom enquiries may be made and to whom applications should be returned not later than 31st January, 1978.

YORK
THE UNIVERSITY
DEPARTMENT OF LANGUAGE
TEMPORARY LECTURERSHIP

Applications are invited for a temporary LECTURESHIP in ENGLISH and LINGUISTICS in the Department of Language for the academic year 1978-79.

Salary on the scale £3,744 to £8,985 a year (under review). It is expected that the appointment will be made at the lower end of the scale.

Six copies of applications (one for those overseas candidates), naming three referees, should be sent by 7 February, 1978, to the Registrar, University of York, Heslington, York YO1 5DD, from whom further details may be obtained. Please quote reference number G 51/40.

Courses

BRISTOL
THE UNIVERSITY
Courses of Advanced Study for the Degree of M.A.
Session 1978-79

The following one-year courses will be offered in the Department of Classics, English, History and Philosophy and Religious Studies starting in October, 1978:

CLASSICS:
Late Roman Studies; Aegean and Anatolian Prehistory

ENGLISH:
Medieval English Literature (1350-1450)

FRENCH:
French Classical Drama and Theatre History

THEOLOGY AND RELIGIOUS STUDIES:
The Problems of Biblical Interpretation in Modern Study; Art, Religion and Society in the Nineteenth Century; An Introduction to Political Theology; The Study of Religion in Buddhism; Society with special attention to other faiths or the contemporary West.

Normal entrance requirements are an honours degree in an appropriate subject. Applicants lacking their degree examinations this year will be considered but further particulars may be obtained from the Head of the Department concerned.

EXTERNAL DEGREE ?
Postal Tuition for all subjects
CHILTERN LONDON TUTORS
4035 WBC

Personal

POSTALOANS UNSECURED
£50 to £1,500
RICHMOND INVESTMENTS LTD.
4 The Green, Richmond, Surrey.

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Polytechnics

NEWCASTLE UPON TYNE POLYTECHNIC
Chief Administrative Officer's Department

ADMINISTRATIVE ASSISTANT
(Examinations/Registry)
(£2,529-£2,853, plus £312 and up to £158.28 p.a. salary supplements)

Applications are invited for the above post, which includes assistance with a varied range of key issues of academic administration, including examination administration, student records, statistical services and the organisation of academic functions.

NJC Conditions and Salary (AP2).

For further particulars and application forms, returnable by Friday, 20th January, 1978, please send stamped addressed foolscap envelope to the Staffing Officer, Newcastle upon Tyne Polytechnic, Ellison Building, Ellison Place, Newcastle upon Tyne NE1 8ST.

ULSTER COLLEGE
THE NORTHERN IRELAND POLYTECHNIC
FACULTY OF TECHNOLOGY

Lecturer II—Building Technology
Salary Scale : £3,744-£5,985

Applications are invited from graduates with appropriate professional experience to teach on HND and HNC courses and assist in the preparation of a degree course in Building.

An interest in Building Science or Building Services and Applied Building Research is desirable.

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,100. It has extensive new purpose built accommodation, including 750 residential places on the 114 acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal.

Further particulars and application forms, which must be returned by January 23rd, may be obtained by telephoning Whiteabbey (0231) 65131 ext. 2243 or by writing to:

The Establishment Officer, Ulster College, The Northern Ireland Polytechnic, Shore Road, Newtownabbey, co. Antrim BT37 0QB.

oxford polytechnic
Department of Construction
Senior Lecturer/Principal Lecturer in Civil Engineering Construction
(Salary £5,523 to £8,070)

Applications, including a curriculum vitae, and the names and addresses of three referees, should be sent by January 30, 1978, to the Head of the Department of Construction, Oxford Polytechnic, Oxford OX3 0BP, from whom further details and application forms may be obtained.

LONDON
MIDDLESEX POLYTECHNIC

STUDENT COUNSELLOR
£5,013-£5,797 p.a. inclusive

To develop an effective student counselling service at the Polytechnic's Enfield and Trent Park (Cockfosters) sites. You would be expected to deal with a wide range of problems affecting the academic progress or personal development of students.

Direct responsibility to the Head of welfare services, you would also be working with staff from other student services areas in the Polytechnic and with counsellors in relation to the non-teaching and academic staff, as well as personal tutors.

You should be of graduate status or equivalent and should have received professional training counselling (preferably in a counselling situation with students or other young people), is required.

Please write for full details and an application form, stating first class or equivalent qualifications and publications (if any) to: Middlesex Polytechnic, Bounds Green Road, N11 2NQ, to whom completed forms must be returned by January 14, 1978.

LEICESTER
THE POLYTECHNIC

TEMPORARY LECTURER II in THE UNIVERSITY OF DESIGN (Post 2/13)

Salary £3,744 to £5,985 inclusive of supplements.

Required from 1st February to July 7th, 1978, to teach the History of Buildings and to be responsible for tutorial work for students of B.A. Art and Design courses and U.A. in History of Art and Design in the modern period.

Application form available from Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester LE1 9BH, Telephone (0533) 60181 extension 2281.

CITY OF LONDON
THE POLYTECHNIC
DEPARTMENT OF LAW
PRINCIPAL LECTURER

Applications are invited for the post of Principal Lecturer in Law from September 1st, 1978. Applicants should have wide teaching experience and active research interests and give full details of research in hand and publication. Professional qualification as a solicitor would be an advantage.

Salary scale: According to Burnham F.E. Report is £6,834 to £7,551 (plus to £8,424 including London Weighting of £765 plus pay supplements of £765).

For further details and application forms, please write to the Assistant Registrar, City of London Polytechnic, 117-121 Commercial Road, London E1 2BA. Completed forms to be returned by January 23, 1978.

MANCHESTER
THE POLYTECHNIC
Staff Development and Educational Methods Unit
RESEARCH ASSISTANT

Required as soon as possible to work in association with the Unit's Teaching Methods Project. Candidates should be graduates with lecturing experience and interest in teaching methods in higher education.

Where appropriate, the successful candidate will have the opportunity to register for a higher degree.

Salary Scale £2,721 to £2,973 plus £441 supplement.

Further particulars and application form, returnable by 23 January, 1978, please send a self-addressed envelope (9" x 4") to the Secretary, Staff Development Unit, Polytechnic, Wigan Lane, Wigan WN1 2NE.

CITY OF BIRMINGHAM
POLYTECHNIC
TUTOR LIBRARIAN

Required at the Ardath Department of Physical Education, Sutton Coldfield.

Salary scale, Lecturer Grade II, £3,744 to £8,985 inclusive of current pay supplements.

Further details and an application form (to be returned by January 20, 1978) from the Personnel Officer, City of Birmingham Polytechnic, Perry Barr, Birmingham B42 2SU.

The Polytechnic of North London

The continued growth of student numbers allows the immediate recruitment of eight staff. The Polytechnic lays stress on teaching excellence, and all staff are expected to do research and publish. A large-scale expansion of evening degree work is planned from next year and the new appointments can expect to be involved in this where relevant. Although it is expected to make the appointments at the level shown it may be possible to offer a Senior Lectureship position to a suitably qualified candidate in each case.

LII Geography
(Department of Geography)

To teach on a range of undergraduate and graduate courses particularly the new evening degree. Should be able to offer one or more of Agricultural, Economic, Settlement, Transport Geography. Must have a good Honours degree and a Higher Degree and/or substantial research experience.

LII Economics
(Department of Business Studies)

To teach on Business courses in the department and on the BA Contemporary European Studies degree. Must have background and research interests in European aspects of economic issues preferably with knowledge of French and/or German. Relevant higher degree in Economics and/or business and research experience desirable.

SL/LII Psychology
(Department of Applied Social Studies)

To teach a range of psychology subjects on courses in the Faculty of Social Studies, including BA Applied Social Studies, BA Sociology, Diploma in Social Work and in the Faculty of Humanities, including the new Psychology option in the BA Humanities degree and in the Language Studies Department. Candidates considered from any subject area but should have a good degree in psychology plus relevant post-graduate experience.

SL/LII Computing
(Department of Mathematics)

To teach computing on undergraduate and postgraduate diploma and degrees. Should have good honours degree and recent industrial experience in the design and or management of large-scale computing projects, preferably involving a distributed system or a large data-base. ICL-1m-ICL 1906E computer and access to a DEC 10 system. The Department has a 2000E Hewlett-Packard mini-computer with graphics.

LII English
(Department of Language and Literature)

To teach on the full-time BA English and BA Humanities degrees and contribute to the evening-only degree in English Studies from next year. Should offer Modern and Contemporary English Literature plus one other area of English literature. Some postgraduate experience preferred.

SL/LII Catering Studies
(Department of Food Sciences)

To teach on the department's degree and diploma in Nutrition/Dietetics, Institutional Management and Home Economics. Should have specialist interests in Institutional Management especially the theoretical and practical aspects of catering systems. Must be graduate in Hotel and Catering Administration/Management and have entering industry experience. Teaching experience an additional advantage.

LII History
(Department of History and Philosophy)

To teach on the BA History and Combined Studies degrees including BA Contemporary European Studies. An evening degree in History is planned. Candidates should have a good degree and research interests in the period 1700-1900 specialising in one or more of British History, European History, Third World History, United States History. Also required a teaching interest in the methodology and skills of history.

LII Polymer Technology
(National College of Rubber Technology)

Applicants must be of graduate status in polymer technology with industrial experience of polymer processing technology, and polymer testing, and be knowledgeable about mould design and manufacture. The appointment will commence on 1st September 1978.

Salary Scales:
(inclusive of London Allowance)

Senior Lecturer £6825-£6849 (Bar)-£7311
Lecturer II £4148-£6897

(Staff at the top of the Lecturer Grade II scale can expect progression to the Senior Lecturer scale subject to satisfying an efficiency requirement.)

Application forms and further particulars (please state post in which interested) can be obtained from the Establishment Officer (T), The Polytechnic of North London, Holloway Road, N7 8DB.

Closing date for applications: 25th January, 1978.

BRISTOL
POLYTECHNIC
DEPARTMENT OF BUSINESS STUDIES

Applications invited for the following posts, tenable from 1st September, 1978:

LECTURER IN ACCOUNTING (Ref. 6/78/TH)
LECTURER IN BUSINESS ECONOMICS (Ref. 7/78/TH)

Candidates should be graduates, preferably with professional qualifications and/or relevant experience in teaching and/or practice in their subject area. Applications should be made on the appropriate application form, obtainable from the Staff Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol BS16 1QY, to whom completed forms should be returned by 16th January, 1978.

BRISTOL
THE POLYTECHNIC
DEPARTMENT OF CHEMICAL ENGINEERING

ASSISTANT LECTURER (Ref. 5/78/TH)

Applications invited for the above post in the Department of Chemical Engineering. Candidates should have a good honours degree in Chemical Engineering and preferably some industrial experience. Applications should be made on the appropriate application form, obtainable from the Staff Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol BS16 1QY, to whom completed forms should be returned by 16th January, 1978.

BRISTOL
THE POLYTECHNIC
DEPARTMENT OF CHEMISTRY

ASSISTANT LECTURER (Ref. 4/78/TH)

Applications invited for the above post in the Department of Chemistry. Candidates should have a good honours degree in Chemistry and preferably some industrial experience. Applications should be made on the appropriate application form, obtainable from the Staff Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol BS16 1QY, to whom completed forms should be returned by 16th January, 1978.

PORTSMOUTH
THE POLYTECHNIC
DEPARTMENT OF MECHANICAL ENGINEERING AND NAVAL ARCHITECTURE

LECTURER SENIOR LECTURER
(Re-advertisement)

Applications are invited for two posts in the Department of Mechanical Engineering, one of which is for a temporary appointment.

The successful candidates will be expected to contribute to the teaching, development and research activities of the Department in a special interest in the fields of Engineering Production or Design, although applications will be considered from persons with qualifications in other fields.

The appointments will be made within the Lecturer II salary scale (£3,744 to £8,985) or Senior Lecturer bar (£6,702 to £7,551) according to qualifications and experience.

Previous applicants need not reapply.

Application forms and further particulars may be obtained from the Staff Officer, Portsmouth Polytechnic, Alexandra House, Museum Road, Portsmouth PO1 2QQ, to whom completed applications should be returned by 24th January, 1978. Please quote reference 046.

LONDON, S.E.1
POLYTECHNIC OF THE SOUTH BANK
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

SENIOR LECTURER/ LECTURER II in POWER SYSTEMS
(Readvertisement)
(Ref. E.40)

Required as soon as possible to fill a vacancy caused by retirement. Applicants should be approximately qualified with a postgraduate qualification and have substantial industrial experience in power systems or control engineering, together with knowledge of modern mathematical and computational methods. Teaching up to first degree and professional qualification levels.

Salary scales: Senior Lecturer, £6,702 to £7,311; Lecturer II, £3,129 to £6,387.

Further particulars and application forms from the Staffing Officer (Ref. E.40), Polytechnic of the South Bank, Borough Road, London SE1 0AA. Tel.: 01-928 8989.

Fellowships and Studentships

ST. JOHN'S COLLEGE
OXFORD
FELLOWSHIPS IN CLASSICS AND MODERN HISTORY

The College invites applications from suitably qualified men and women for :—

(i) an Official Fellowship in Classical Languages and Literature ; and
(ii) an Official Fellowship in Modern History.

Both appointments to be tenable from 1 October, 1978, or as soon after as convenient.

For :—

(i) candidates should be prepared to teach Greek and Latin Language and Literature for Honour Moderations, Literae Humaniores and related Schools.

(ii) candidates should be prepared to teach Medieval History (up to 1,600) for both the Preliminary Examination and Final Honour School. University Lectureships (C.U.F.) will be associated with both appointments.

Applications, with details of career and publications and the names of three referees, should be sent not later than 28 January, 1978, to the Senior Tutor, from whom further particulars may be obtained.

LEEDS
THE UNIVERSITY
DEPARTMENT OF MECHANICAL ENGINEERING

I.C.I. RESEARCH FELLOWSHIP ON HEATING (INDUCED) OF POLYMERS

Applications are invited for a three-year I.C.I. sponsored Research Fellowship. The work involved represents a cooperative project between industrial research in the University, and the University Leeds. It will include the development of computer programs to predict the vibrational characteristics of moulding systems, and the application of the programs to particular problems of interest to the sponsor. Experience in system dynamics and/or heating analysis would be an advantage. The research will also carry out investigations of machine tool vibration.

A first degree, or a Post-graduate Diploma in Mechanical Engineering is required. The salary will be within the I.A. Scale for Research Assistants, but in the case of a graduate with a Diploma, a higher figure may be negotiable.

Applications, and further information should be directed to Professor D. Dowson, Department of Mechanical Engineering, The University, Leeds LS2 9JT (telephone 0532 31751 extension 2541).

ULSTER
THE NEW UNIVERSITY
SCHOOL OF PHYSICAL SCIENCES
RESEARCH FELLOWSHIP OPERATIONAL RESEARCH

Applications are invited for a Research Fellowship in Operational Research in the University which will be financed by the Northern Ireland Council for Nurses and Midwives, to undertake a study of training methods for nurses in Northern Ireland.

The Fellowship is for a period of one year. It is possible that at the end of that period a further fellowship may be offered.

Applicants should have some experience of O.R., preferably in manpower planning and/or resource allocation.

Salary within the range £3,333 to £5,627 per annum (with F.S.S.U.).

Further particulars may be obtained from the Registrar, The New University of Ulster, Coleraine, Northern Ireland BT52 1SA quoting Ref. 777/78 to whom applications, together with the names and addresses of three referees, should be sent not later than 17th January, 1978.

Studentships

LONDON
THE CITY UNIVERSITY
SID SCHOLARSHIP

Applications are invited from graduates of any discipline for a Scholarship in Industrial Studies tenable for one year from October 1978. The Scholarship is intended to provide a broad introduction to industrial studies and is open to graduates of any discipline who have not had more than two years' full-time post-graduate experience.

Further details may be obtained from the Scholarship Secretary, Department of Industrial Studies, The City University, St. John Street, London EC1V 4PB. Applications should be received by 31st January, 1978.

GWYNEDD
THE BOARD OF STUDIES
WHOLE CHAIR

Applications are invited for the above Chair in Celtic Studies, tenable at the University College of North Wales, Bangor. Applications should be made on the appropriate form, obtainable from the Assistant Registrar (Personnel), University College of North Wales, Bangor, Gwynedd LL57 2DG, to whom completed forms should be returned by 31st January, 1978.

BIRMINGHAM
THE UNIVERSITY
CHAIR OF WORK STUDY AND STUDIES

Applications are invited for the above chair, tenable from 1st October, 1978, or such later date as may be agreed. The successful candidate will be expected to lead a team of research workers in the field of work study and to develop courses in this field.

Salary on the scale for a chair (£8,985 per annum) plus superannuation benefits.

Further particulars and application forms may be obtained from the Secretary, University of Birmingham, P.O. Box 363, Birmingham B15 2TT. Closing date 30th January, 1978.

PRINCIPAL
OF RECOGNISED INSTITUTE
LANGUAGE SCHOOL ON SOUTH COAST

Applications are invited for the post of Principal of a language school, starting early in 1978, which is expanding and has a full time staff of 12 and part time staff of 20. Good salary and excellent pension scheme. Applicants should have experience of language teaching and preferably administrative experience. Good academic qualifications essential.

Please write, giving C.V. to Box 1977 V, THES, W.C.1X 8EZ.

OXFORD
THE UNIVERSITY
Appointment of an ADMINISTRATIVE OFFICER

Applications are invited from graduates for an administrative office with particular responsibility for the organisation of the University's Summer Vacation Courses for Overseas Students. Salary on the scale £5,627 per annum to £6,435 per annum (under review). Starting point depending on age and experience.

Further particulars should be obtained from the Deputy Registrar (Administration), University Offices, Wellington Square, Oxford, OX1 2JD, to whom applications should be sent by not later than 1 February, 1978.

Colleges of Higher Education

St Mary's College
Strawberry Hill

This is a Catholic College of Higher Education with 1,200 students (mixed). It offers internal BA, BSc, DH and BEd Degrees of London University at Honours level.

Applications are invited for the following posts :

ACADEMIC VICE-PRINCIPAL

Appointment from 1st September, 1978. Salary in accordance with Burnham Further Education Scale for Vice-Principals, Group 7 or Group 8 (under review) + London Allowance.

LECTURER IN ENGLISH

Candidates should possess an Honours Degree and Postgraduate qualifications in Language. The successful candidate will be expected to lecture in the TEACHING OF ENGLISH AS A SECOND LANGUAGE FOR THE DIPLOMA OF THE UNIVERSITY OF LONDON and to participate in the work of lecturing for BEd and BA. Salary in accordance with Burnham Further Education Scale + London Allowance. This post could be available from Easter, 1978. Further details from the Principal, to whom applications should be sent with the names of three referees. There are no official forms. Applications should arrive not later than 3rd February, 1978, and should be addressed to : The Principal, St. Mary's College, Strawberry Hill, Twickenham TW1 4SX. Tel : 01-892 0051, ext. 22.

Hull College of Higher Education
Cottingham Road Hull HU6 7RT
Telephone (0482) 41451

FACULTY OF DESIGN STUDIES

Applications are invited for the post of

GRADE IV
HEAD OF SCHOOL OF FINE ART

which falls vacant as a result of the retirement of the present holder.

The School has responsibility for the following courses :
BA Fine Art (CNAA Honours Degree)
Foundation Course
Community Arts Programme

It includes a section providing History of Art and Complementary Studies for its own courses, and for courses in the School of Design.

The person appointed will be expected to have appropriate administrative ability, broad interests and significant professional experience in Fine Art, and to be a person of vision in the field of the arts in higher education.

Further particulars and forms of application may be obtained from Mrs. D. Liddell, Administrative Assistant (Personnel) at the above address, to whom completed forms should be returned.

Closing date 20th January, 1978.

This College is formed from an amalgamation of Colleges of Art Commerce Education Nautical Studies and Technology

Colleges of Further Education

LONDON
EAST LONDON EDUCATION AUTHORITY
LONDON COLLEGE OF FURNITURE
41 The Londonderry Road
Stratford, London E15
ASSISTANT
to Head of Department
Required for work in the Department of Design and Technology in one of the Colleges for Further Education.

Applicants should have a degree or acceptable equivalent in an appropriate design discipline or appropriate professional experience.

Salary on the scale £3,744 to £8,985 per annum (under review) with superannuation benefits.

Further particulars and application forms from the College Assistant Secretary, Polytechnic Building, Stratford, London E15 2BB. Closing date 20th January, 1978.

PRINCIPAL
OF RECOGNISED INSTITUTE
LANGUAGE SCHOOL ON SOUTH COAST

Applications are invited for the post of Principal of a language school, starting early in 1978, which is expanding and has a full time staff of 12 and part time staff of 20. Good salary and excellent pension scheme. Applicants should have experience of language teaching and preferably administrative experience. Good academic qualifications essential.

Please write, giving C.V. to Box 1977 V, THES, W.C.1X 8EZ.

SURREY
EDUCATION COMMITTEE
NORTHEAST SURREY COLLEGE OF TECHNOLOGY
Reigate Road, Ewell, Surrey
Principal : R. J. Bowden, M.A.

Required as soon as possible

LECTURER I IN PHYSIOLOGICAL SCIENCES

Applications are invited for the above post from graduates or equivalent with qualifications in physiology (preferably human) together with teaching experience. The post is both to be a full time one and to include part time teaching in the evening (course ONC/D and HNC/D) and Higher National level. A good honours degree and experience in research and/or teaching are desirable.

Salary will be in accordance with the current Burnham Scale (£3,744 to £8,985 per annum) plus £441 supplement. Starting salary will be dependent on age and experience.

Further particulars and application forms from the Staffing Officer, Northeast Surrey College of Technology, Reigate Road, Ewell, Surrey KT17 3DS. Telephone 01-393 1451 ext. 215. Closing date for applications 17 January, 1978.

General Vacancies continued

COUNCIL FOR NATIONAL ACADEMIC AWARDS
(re-advertisement)

Applications are invited for the post of

ASSISTANT REGISTRAR
with responsibilities in Business and Social Studies

In addition to their work in specified fields, Assistant Registrars are involved in the development of academic policy.

Candidates for the post should be well qualified academically and should have had appropriate teaching and/or academic administrative experience, preferably in the field of higher education.

The salary on appointment will be within the scale £5,925-£7,536 (merit bar £6,849) including London Weighting. Further particulars of the post may be obtained from :

Secretary (BSS)
Council for National Academic Awards
344/354 Gray's Inn Road, London WC1X 8BP

to whom applications giving details of qualifications and experience and mentioning the names of two referees should be submitted by Tuesday, 31 January, 1978.

Overseas

Ballarat College of Advanced Education
VICTORIA, AUSTRALIA

Senior Lecturer in Librarianship
Aus $19,675-Aus $21,078

Applications for the above position invited from graduate qualified librarians. The college offers an undergraduate 3 year course for Diploma of Librarianship and a one year course for graduate Diploma of Librarianship, a Department of Librarianship has a staff establishment of 5 full-time positions plus support from part-time and visiting lecturers. There are approximately 135 full-time librarianship students.

The appointee will have opportunity to lecture at a number of levels in both courses offered. As the most senior staff member under the Head of Department, the appointee will be involved in senior administrative duties. It would be expected that, in addition to good academic qualifications, an applicant should have had considerable library and lecturing experience.

Write for details to the Academic Registrar, B.C. A.E. Gear Avenue, Mt. Helen, Ballarat Vic. 3350, Australia.

Official applications must be received by 31 January, 1978.

Administration

UNIVERSITY OF DUNDEE
CENTRE FOR PETROLEUM AND MINERAL LAW STUDIES

ADMINISTRATIVE ASSISTANT

Applications are invited for a temporary post in the Centre for a period of up to two years from the effective date of appointment. The appointee will assist the Director of the Centre, Professor T. C. Daniels, in the administration of the Centre's activities of teaching and research in Petroleum and Mineral Law, particularly in the maintenance and development of contacts between the Centre, the legal profession and the oil industry, and in the organisation of short courses for those already professionally concerned with Petroleum and Mineral Law. He (or she) should also be capable, after a reasonable period of preparation, of participating in the teaching work of the Centre.

The successful applicant will have a good legal qualification (not necessarily in the Law of Scotland) together with relevant administrative, academic or professional experience. Appointment will be within the range £3,735-£6,555 (i.e., equivalent to the University Lecturer I scale) at a point determined in the light of the qualifications and experience of the appointee.

Applications (four copies) naming two referees and quoting Reference Ent/59/77G, should be submitted to The Secretary, The University, Dundee DD1 4HN, as soon as possible.

Overseas

OVERSEAS TEACHING POSTS

INSPECTORS OF ENGLISH—PRIMARY
(CAMEROON)

Educational Delegations for the East and North Provinces—Bertoua and Garoua.
Two members of a team concerned with the introduction of English in Francophone Primary Schools. To inspect classes, advise teachers and organise in-service courses.
Degree (preferably in English or Modern Languages), one-year University diploma in TEFL, relevant experience, preferably including teacher training, fluent French. Men only.
Salary: £4,589-£5,618 pa + 10% inducement.
Benefits: Personal and children's allowances: free accommodation.
Two-year contract. 76 HE 86

ELT ADVISER
(CAMEROON)

South West Provincial Delegation for Education, Buea
To advise on English language teaching at Primary, Secondary and Teacher Training levels.
Degree, teaching qualification and MA in Applied Linguistics (or one-year university diploma in TEFL/TESL): at least four years' relevant experience, preferably overseas and in teacher training; good French.
Salary: £4,589-£5,618 pa + 10% inducement.
Benefits: Personal and children's allowances; free furnished accommodation. Two-year contract. 77 HE 9

HEAD OF SCIENCE
(GHANA)

St John Bosco's Training College, Navrongo
To lecture in General Science to 'A' level and supervise three tutors in the Science Department.
Science degree and at least three years' Secondary or Further Education teaching experience at 'A' level essential. Teaching qualification and/or teacher training experience desirable.
Salary: £4,589-£5,618 pa.
Benefits: Free accommodation; overseas and children's allowances and other benefits. Four-year contract. Shorter period may be possible.
78 RT 1

TEACHING ADVISER
(BRAZIL)

Sociedade Brasileira de Cultura Inglesa, Rio de Janeiro
Teacher-training, administration of language laboratories, materials production, assisting with organisation of Cambridge EFL examinations.
Degree and/or Teaching Certificate. TEFL qualifications desirable. Some experience of teaching and organising language laboratories.
Salary: Cr$15,092.00 per month (£539 approximately).
Benefits: Annual bonus £750; outfit grant; medical scheme; two-year contract, renewable. 78 PO 1

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

THE BRITISH COUNCIL

THE BRITISH COUNCIL

Educational Technology Overseas

As part of its responsibility for Britain's educational and cultural relations the British Council has staff overseas and runs training courses both in London and overseas to help satisfy the needs of developing countries for manpower trained in the application of educational technology. The Council wishes to enlarge its cadre of staff responsible for this work, which falls into three main areas:—

REPROGRAPHICS, GRAPHIC DESIGN AND LAYOUT
PHOTOGRAPHY, TELEVISION AND FILM
RADIO AND AUDIO RECORDING

We should like to hear from you if you have skills and experience in one or more of these areas of work, preferably gained in an educational setting. Creative talent is required and, since the work will be in an instructional and tutorial capacity, an aptitude is necessary for understanding the learning problems of students, especially mixed-language groups.

Up to four appointments will be made, on career or contract terms, which will at first be in London but with the likelihood of overseas visits for help with special courses. After one or two years, a posting (which may be on promotion) to one of the Council's overseas offices is likely and, for a career appointment, the subsequent pattern of postings will include assignments both in London and overseas.

The starting salary is about £4,900 or up to £5,700 for a particularly well-qualified candidate, and terms and conditions of service are in line with those of comparable organizations in the public sector; free accommodation and overseas allowances, including children's education allowances, are provided while overseas.

It is possible, in addition, that some more junior posts will be vacant with a starting salary, for a candidate aged at least 25, of about £3,500.

For further details and an application form, to be returned by February 6, write or telephone quoting (C13) to: Staff Recruitment Department, The British Council, 65 Davies Street, London W1. Telephone 01-499 8011, extension 3041.

OVERSEAS DEVELOPMENT

KNOW-HOW is vital to developing countries

Thailand

Expert in Agricultural Engineering

at the Asian Institute of Technology to teach at postgraduate level and undertake and supervise research. Applicants should have degree in agricultural engineering or related subject with teaching, industrial and consultancy experience, plus experience in agricultural physics or soil and water engineering. Appointment two years. Salary according to qualifications and experience plus tax-free allowance. Superannuation rights may be safeguarded. (Ref 317.)

This post is wholly financed by the British Government under Britain's programme of aid to the developing countries. In addition to basic salary and overseas allowances other benefits normally include paid leave, free family passages, children's education allowances and holiday visits, free accommodation and medical attention. Applicants should be citizens of the United Kingdom. For full details and application form please apply, quoting reference number, stating post concerned, and giving details of age, qualifications and experience to:—

ODM

Appointments Officer,
MINISTRY OF OVERSEAS DEVELOPMENT,
Room 301, Eland House,
Stag Place, London SW1E 5DH.

HELPING NATIONS HELP THEMSELVES

Saudi Arabia Dhahran

University of Petroleum and Minerals

The Research Institute of the University of Petroleum and Minerals is seeking engineers, mechanics and technicians, with particular experience in applied research at government or industrial laboratories in geophysics, solar energy, building materials and road paving materials.

Minimum regular contract for two years, renewable. Excellent salaries and allowances, free air-conditioned housing, free air transportation to and from Dhahran each two-year tour. Attractive educational assistance grants for school-age dependent children. Local transportation allowance in cash each month. Six weeks' vacation each year.

Apply with complete résumé on academic and professional background, list of references, and with copies of degrees, including personal data such as family status (wife's maiden name, names of children, age and sex), home and office addresses, telephone numbers, to:

University of Petroleum and Minerals,
Miss E. Whitechurch,
Gabbitas-Thring Services Ltd.,
Broughton House,
6, 7 and 8 Sackville Street,
Piccadilly,
London, W1X 2BR.

It is expected that interviews will be held at the end of January.

TASMANIAN COLLEGE OF ADVANCED EDUCATION

HEAD
SCHOOL OF ART

The Tasmanian School of Art is a long-established, well-equipped school with 21 lecturers and some 260 students. It runs two, three and four-year Diploma and Degree courses in Fine Art, Craft, Design and Art Teacher Education.

Applicants should have a wide experience in Tertiary Art Education, staff coordination and administration. They should have a demonstrable interest in a range of Art/Craft/Design activity and in sub-tertiary Art Education. They should have an interest in developing links with related Arts (Music, Theatre, etc), and in community ventures. Their continuing professional creative activity in some aspect of the arts would be expected.

Further details are available on request.

Location: Hobart.
Salary: Head of Division (3) $A28,671.
Closing date: Friday, February 10, 1978.

Applications, stating all relevant information, should be made to:—

The Personnel Officer,
TCAE,
Box 1214, PO,
Launceston, Tas 7250.

SWINBURNE COLLEGE OF TECHNOLOGY
(Melbourne, Australia)

LECTURER IN BIOPHYSICS
(Contract Appointment)

Applications are invited from graduates with a relevant higher degree in physiology, clinical biophysics or biomedical engineering and with clinical and/or research experience in cardiovascular physiology.

Teaching experience will also be considered in making the appointment.

The appointment will be by contract for three years' duration including removal and repatriation expenses. Permanent appointment, during or at the expiration of the period, may be negotiated by mutual agreement. The successful applicant will be involved in the undergraduate and postgraduate biophysics teaching programme with particular responsibility for the cardiovascular component of these courses. The successful applicant will also be encouraged to participate in an area of relevant applied research.

Swinburne College of Technology is a tertiary educational institution affiliated with the Victoria Institute of Colleges. The Department of Physics is a member department of the Faculty of Applied Science, and has academic responsibility for undergraduate courses in biophysics and instrumental science together with postgraduate programme in biophysics, biomedical instrumentation and instrumental science.

Salary: Lecturer II $A14,831-$A16,748 - Lecturer I $A17,148-$A19,261 p.a.

Applications close 16 February, 1978.

Further information about the position, conditions of employment and application procedure may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

W. GERMANY

FACHHOCHSCHULE REUTLINGEN

DEPARTMENT OF BUSINESS STUDIES

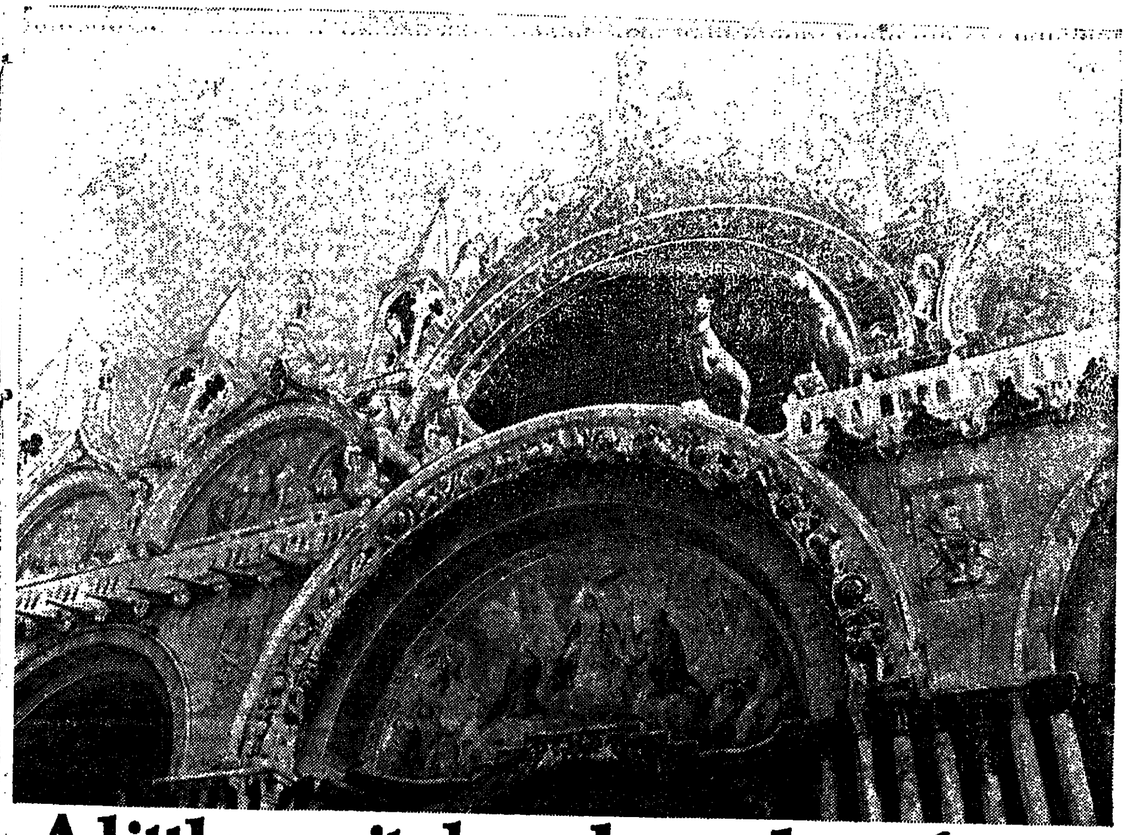
PROFESSOR OF ENGLISH
(HZ 62)

Applications are invited for the above mentioned position in the Department of Business Studies.

Applicants should hold an appropriate second degree, have teaching experience at tertiary level, ideally TEFL at tertiary level and/or industrial experience of at least five years.

Appointee will share in the teaching of Business English at all levels and the further development of new curricula. Theoretical German essential.

Further particulars may be obtained from the Rektor der Fachhochschule Reutlingen, Alteritzerstrasse 7410 Reutlingen, Germany, to whom all correspondence should be directed.



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